SIR JADUNATH SARKAR

Glimpses of Mughal Architecture

1953

PLATE I.



FATHPUR SIKRI : SALIM CHISHTI'S TOMB : Coloured spandril over exterior of entrance to the Cenotaph Chamber.

Glimpses of Mughal Architecture



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Glimpses of
Mughal Architecture

Introduction With Historical Analysis

by

Sir Jadunath Sarkar

Text by

S. K. Saraswati

Edited, Compiled and Surveyed

by

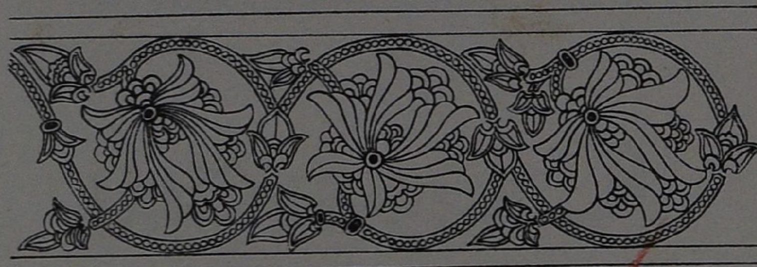
A. Goswami

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Preface

THIS book owes its origin to a suggestion of Dr. Rajendra Prasad, the first President of the Indian Republic. When, three years ago, I was showing him my newly published book on the art of the Orissa Temples, he told me that a book on the same lines illustrating the remains of Mughal architecture, was badly needed and if properly produced would add to the glory of our country. Of even more practical value was his promise to patronise such a work, which from its nature must be beyond the means of any private author or publisher to print in adequate style. I then made an extensive survey, measuring and copying the Mughal decorative details, and trying to reproduce their original appearance in my drawings. From the vastness of these remains, my search could not be exhaustive, it had to be selective. I started with Edmund W. Smith's standard works on the Mughal architecture of Fathpur Sikri and Agra as my guide, but my intensive study showed that his assistants had made many mistakes in drawing the plates printed in his books. These, it has been my duty to correct in the corresponding sheets of my volume. In some cases my own drawings have been

supplemented by the addition of plates and sketches previously printed in books which are now very scarce.

It is not easy to imagine the cost of a book of this class when produced in a manner that would not only delight the eye but also give practical help to students of art in foreign countries. I could not have placed the fruit of my labour before the public but for the generous financial help of the Governments of the Indian Union and West Bengal.

Shri Jawaharlal Nehru, our Prime Minister and a great lover of art, Moulana Abul Kalam Azad our Education Minister, and Dr. H. C. Mookerji the learned Governor of West Bengal, have taken a personal interest in promoting this publication.

Among the enlightened public who have helped me with donations and in other ways, I thankfully mention the names of Sri Santi Prasad Jain, Sri L. N. Birla, Dr. N. N. Law, Sri Narsingh Das Agarwal, Sri Pannalal Sarogi, Sri K. D. Jalan, Sri D. N. Bhattacharjee, Sri M. G. Bhagat, Sri G. K. Khemka, Sri Mungtu-ram Jaipuria and Sri N. K. Gossain.

To all those lovers of India's past and admirers of India's artistic achievements, I offer my hearty gratitude.

Calcutta, 15th September, 1953. A. GOSWAMI

PLATE II.



FATHPUR SIKRI: THE GREAT MASJID: Cornice and string beneath the pendentives supporting the Grand Dome.

Glimpses Of Mughal Architecture



Introduction & Historical Analysis

by

Sir Jadunath Sarkar



Introduction

THE Mughal dynasty of Delhi is gone. Their crescent banner no longer flies over the Red Fort. But all is not gone; their legacy to India is imperishable; it survives in our social manners, our literature, and our art, and stands out as a substantial portion in the body of that composite product which we call the Indian culture of today. Our mediaeval literature may be a sealed book to those who know not the language; but all who have eyes to see can still read the monuments of their architecture, and all who have minds to reflect can pursue the entrancing question. With what elements has Muslim rule enriched the Indian building and decorative art? Faithful illustrations of that art, when placed before them, will help to solve that question. This is the justification of the present volume.

The Historical Background of Mediaeval Indian Art.

First, let me clear the ground by a brief survey of our history. The Muslim conquest of India began as a succession of annual raids by nomad horsemen from beyond the Khyber pass. The raiders used to go back to their home after exacting booty and promise of tribute. In time this stage gave place to their annexation and settlement in Indian territory. The early conquerors, as was natural to invading armies, brought with them only soldiers, the necessary number of clerks, storekeepers and priests, and only the few craftsmen required for military purposes such as carpenters, armoury-smiths, farriers, and catapault-workers. The capture of a Hindu city was followed by the hurried building of a mosque there, in which the victors offered thanks to their God. These earliest mosques were built out of the materials found ready to hand in the old or dismantled Hindu temples there. The work was done by employing local Hindu labourers, the Muslims supplying only the guidance to see that the basic principles of the Islamic prayer-house were observed.

Gradually the Muslim throne became firmly fixed at Delhi (now known as the Qutb Quarter), and the revenue of fertile provinces began to be poured at the feet of the Sultan under a new regular administration. Now came the construction of splendid mosques and tombs, on the best models of Islam outside India. The best examples of this stage are Iltutmish's tomb and the Qutb Minar,—but not the Quwat-ul-Islam mosque attached to the latter, which still shows some undefaced Hindu figure-carvings on the pillars, proving clearly whence these were pillaged. Also Ala-ud-din's mosque there.

Under the Tughluqs (C. 1300—1360) we have first the massive but crude walls of old Tughlaqabad fort, reminding one of the Mycenaean wall-structure. Soon dressed stone came to be used. The detached solitary tombs on the road to the Hauz-i-Khas and elsewhere mark the Lodi times (1450—1500), when some of the buildings with their thick sloping walls narrowing at the top suggest ancient Egyptian architectural principles. But this feature has been more correctly explained as an engineering device for neutralising the thrust of the dome on the walls. The only Egyptian huge sloping gate that I have seen in South India stands in the Golkanda fort.

A striking change of style came with the Mughal Emperors, after Akbar's accession in 1556. Hitherto rough-hewn free stone and granite had been the material employed in building; now came finely dressed stone and an eye for colour and decoration. Marble panels in charming relief, perforated lattice windows of a delicate pattern, mosaic inlay work in many colours of stones, coloured ceramic tiles for the roof, now became the mark of the highest art and they have come down to us.

Humayun's tomb-mosque marks the beginning of the evolution of this style, and Akbar's sepulchre at Sikandra the completion of its first stage. Shaikh Salim Chishti's tomb at Fathpur Sikri is the perfect example of that synthesis of Saracen and Indian architectural styles which was the life's work of this great Emperor.

Akbar was the builder in red sand-stone (later mixed with grey), and Shah Jahan was the builder in white marble with many-coloured decorations, and the later Mughal style begun by him marks the final development of this art in India. Of the Taj Mahal, that "dream in marble", nothing need be said here, because nothing new can be said. Its matchless perfection is best illustrated by comparing it with its imitation, the tomb of Aurangzib's wife Rabia-ud-daurani in Aurangabad, which is called the Deccani Taj Mahal but wrongly. Here the short thick stubby minarets, standing too close to the platform of the dome of the tomb, spoil the fairy-land like effect which the tall slender white marble minarets of the northern Taj produce on even the rudest beholder. The ground plan of the two was the same, but a wrong taste in the details has made the result so different.

THE SOCIAL SYNTHESIS

War is, after all, a cruel business; but in time things settle down, especially if the conquerors have given the conquered people the benefits of peace and a regular civil administration. This the Sultans of Delhi began to do, and the Mughal Padishahs carried the process to completion. Thus history and human nature forced the alien rulers and the ruled to come closer together and join in conducting the same country's government.

Of this reconciliation we have the first signs in the poetry of Amir Khusrau, which breathes a sympathetic understanding of the Hindu people's religion; witness his famous verses, "Every tribe has its own special centre of faith and path of righteousness". He used the language of the people (Hindi), mixed with his mother-tongue Persian, though he was ranked as the foremost among the Indo-Muslim poets of Persian. Urdu (called Rekhta in the Deccan) was then only the *lingua franca* of the camp and the bazar; it became the language of literature and polished society much later, with Wali of Aurangabad (about 1720).

The dissolution of the Delhi central power darkened our history in the 15th century. The Afghans,—Lodis and Surs, who followed on the throne,—enjoyed too short and unsettled a rule to do much for Indian culture, which was, however, going on all the time creating a fusion, even without royal patronage or Court guidance. For instance, Kabir's verses and Malik Muhammad Jaisi's *Padumavat* owe nothing to any monarch's favour. The people were being united after all, and this synthesis reached its official recognition under Akbar.

That natural "hero as King" was illiterate, but a heaven-born genius, . . . great as a man of action, but greater still in far-sighted political imagination. On coming to a shaky throne, he brooded over the condition of the land of his birth and of the people entrusted to his charge by the Creator. Centuries of disorder, misrule, internal feuds, and foreign invasion,—broken only by a few short spells of benevolent paternal government, —had weakened and impoverished the country. How to build a barrier against religious feuds,

baronial rebellion and armed invasion from abroad? It could be done only by a great stroke of statesmanship. The young Emperor, as Abul Fazl tells us, used to sit down on a detached rock of Fathpur Sikri and meditate in solitude for a remedy to India's misery. At last he realised the truth that India could be happy only if she was strong, and she could be strong only if all her races were united under an impartial progressive government. So, he initiated a new policy which was truly modern. Its basic principles were universal toleration *(Sulh-i-Kul)*, equal rights for all subjects, and careers freely open to talent in the public service without favour to the ruler's caste or creed.

The rigid exclusiveness of Islam and the tyranny of the Canon Law *(Shariat)* over every form of State activity were curbed by Akbar, though this reform provoked a long and bitter struggle, including one country-wide rebellion which shook his very throne. But in the end his statesmanship triumphed without a check for fifty years after him, and its effect was seen in the full flowering of Mughal culture and art under Jahangir and Shah Jahan. In literature the best representative of the new spirit was Abdur Rahim Khan-i-Khanan, whom Akbar regarded as his adopted son, and who was not only himself a poet on Indian themes in Persian and Hindi, but the liberal patron of numberless Hindi poets. He was fondly regarded as the modern incarnation of Vikramaditya, the patron of Kalidasa, in the days of yore. In art this court synthesis found expression in the Indo-Saracen school of painting, the so-called "Mughal painting" which reached its perfection in Shah Jahan's time, and the Sikandra Mausoleum and Shaikh Salim's Tomb, where even the blind can see how the Indian style and *motifs* have been harmoniously blended with the imported Islamic elements.

This is the eternal illustration of Akbar's principle of unity amidst diversity, oneness of spirit in spite of differences of outward form.

THE CONDITIONS LAID DOWN BY ISLAM ON ART

In Islam it is a sin for a man to make the picture or statue of a living creature. On the Day of Judgment such an artist would be scornfully challenged by the Angel with the words, "You have made a figure, give it life if you can". That feat being impossible for a mortal, the erring artist would be doomed to hell for his presumption in trying to rival his Creator. Therefore, no detail or ornament in an Islamic building can represent the human form. I met a curio-dealer in Agra who was so strict a Muslim that he would not handle any marble mosaic depicting even a parrot or any other bird. Hence, unlike Hindu or Greek temples, no Muslim building can be decorated with animal figures in the round, reliefs, friezes, or carved panels. With them architectural decoration must take the forms of foliage, geometric designs, or lettering of the text of the Holy Book. Hence the necessity of mosaic work and the use of coloured ceramics for inlaying and tiling the roof. In its most developed form, Islamic decoration may be called cloth embroidery transferred to stone.

The lay-out of a mosque is determined by the unalterable rules of the Islamic religion. There must be a lavatory or cistern in it (usually in the centre of the court-yard) for the congregation to make their purifying wash *(wazu)* before praying. Inside there must be a pulpit *(mimbar)* usually with three steps, from the top of which the leader in prayer *(imam)* delivers

his speech or recites the *Khutba*. There should be a niche (*mihrab*) like a miniature apse in the western wall to indicate the centre of the faith *(qibla)*. And the hall must be unpartitioned and large enough to hold all the people usually praying there, because "prayer in congregation" is a duty enjoined by the Arabian Prophet, as opposed to the lonely meditation of Hindu ascetics and Islamic Sufis (who were regarded as heretics). The Muslims must face the *qibla*, or centre of their faith, a temple in Mecca. That city lies to the West of India and therefore the Indo-Muslim prayer-house must be enclosed by a dead wall on its western side, lest any opening in it should reveal some human being or material object (even a picture) and thus lure away the penitent's thoughts from Allah to it.

A dome or cupola *(qubba)* is not a primary necessity in an Islamic place of worship. But it became an integral part of mosques very early in the history of that religion. It was helpful to the *muazin* to shout his call to prayer (*azan*) from a height, before a special tower *(mazina)* for that purpose became a regular part in the planning of mosques.

People often wonder why there is a building exactly like a mosque standing absolutely unused at the *eastern* side of the enclosed grounds of the Taj Mahal. This is the reason. The exact duplicate of this building is the real mosque, still used for praying, which stands on the *western* border, because the prayer-hall of the latter is closed by a dead wall on its west, while the entrance to the "show mosque" is from the west. This useless mosque on the eastern side is technically called the *jawab* to the real mosque; in other words, it is a parallel or counterpart required by the rules of symmetry, and it exactly balances the real mosque to the eye of the beholder.

THE MEN WHO BUILT THESE

The Muslims who invaded and later settled in India were united by religion though diverse in race. The rulers and most of the soldiers were Turks, the Secretaries and higher administrators were Persians, and the priests, Arabs though usually settled in Persia and Khurasan. This racial composition determined the character of the civilisation that grew up in the Muslim court of Delhi. The camp was Turkish and the Turki language continued in use in it, along with Persian and bazar Urdu, as late as the end of the 17th century. It is on record that Mirza Rajah Jai Singh I of Amber, who died in 1667, could speak Turki well, as he had shared the Mughal campaigns in Qandahar and Balkh. The Afghans did not contribute to Indo-Muslim culture anything worth mentioning. Indeed, many of the natives of Afghanistan became converts to Islam only in the 12th or 13th century of the Christian era.

Therefore, the dominating force in Indo-Muslim Court culture came from Persia. But these Persians were not always of the Aryan (Iranian) breed; many belonged to the Semitic race and some even were Turanians speaking the Persian language and fully imbued with the Persian spirit and culture.

The Persians have been truly called "the French of Asia",—just as in our school days we read of the Japanese being described as "the Anglo-Saxons of the East". And the Persian influence has given to Indo-Muslim art and literature the three supreme qualities of the French

mind, namely lucidity of expression, emphasis effected by the proper selection and economical use of the material, and orderly arrangement. This delicacy of taste is the highest gift with which Muslim art has enriched Indian civilisation, whether in poetry, painting or architecture.

The hand that built the monuments of our mediaeval art was Indian, but the brain that guided the hand was Persian. In one particular, the use of ceramics in inlaying or roofing, the Hindus were nowhere; it was a pure importation from Persia, especially from the city of Kashan there.

"The Indian ceramic tiles of the Moghul period .... were essentially inspired from Persia, but had also distinctive features of their own". (J. H. Schmidt.)

"With the tomb of Humayun ..... the Persian style established itself (in India). In Akbar's tomb it again makes way for the Indian,—here the old *Vihara* type,—to reappear in Jahangir's tomb in Lahore (about 1630). The Moghul style under Shah Jahan (1628-1658) finds its most brilliant manifestation in the Taj Mahal which shows the Indian and Persian traditions in perfect union". (E. Diez.)

MOSAIC AND PERFORATED LATTICE-WORK HOW DEVELOPED IN INDIA

Any general statement about the architecture of Fathpur Sikri would be incorrect and useless, because Akbar's constructions there are many, built at different times and in the pursuit of widely differing architectural designs. One can almost say that this grand monarch let his fancy here run wild and indulged each artistic caprice as it arose in his mind year after year. The buildings of Fathpur therefore lack the compactness of planning or aesthetic integrity of the Taj Mahal, which in the lay-out of its grounds, its .mosque and the parallel to that mosque, and its gateway, reveals the work of one master-mind in one completed operation.

I shall, therefore, pass over the other buildings of Fathpur, such as the Panch Mahal, the so-called astrologer's house, the Diwan-i-am, the Turkish Sultana's chamber etc., but consider the sepulchre of Shaikh Salim Chishti and its associated buildings which form one compact group, isolated by its boundary walls from the rest of the city. Here silent strength and sober magnificence are the predominant characteristics that strike the humblest visitor's eyes as he looks at the Victory Gateway *(Buland Darwaza),* to which Fergusson has given the highest praise as the only design anywhere in the world that has solved the problem of inserting an adequate door in a huge edifice. The mosque on the western side of the tomb-courtyard is equally grand and impressive by its very spareness of decorative details.

The tomb of the Shaikh is the finest architectural jewel of the entire place. It is decorated, but the style of its ornamentation is so chaste that no exuberance of detail mars the general effect, when the eye passes over the whole. Black and white have been harmoniously blended here as in no other edifice of the Mughals. The marble eaves and the Hindu corbel brackets (S-shaped) which join the pillars to the walls, suggest a Hindu temple without its inner sanctuary. In producing this effect the stone-carver has joined hands with the building

PLATE III.



FATHPUR SIKRI ; SALIM CHISHTI'S TOMB : Painted Soffit of Entrance to the Cenotaph Chamber.

architect, each the master of his own peculiar craft. The perforated lattice-work of diverse line-designs, both here and on the top floor of Akbar's own sepulchre at Sikandra, gave the hereditary Hindu carver his best chance; his ancestors for a thousand years past had worked on ivory, sandalwood and ebony, and now he could transfer the same skill to white marble; the days of cheap crudely-hewn freestones were gone. At Fathpur, the adorer of the saint feels his mind instinctively chastened by the very look of the sepulchre from the outside.

Mosaic work in stone may have had its origin in the prehistoric man spending his leisure in decorating his hunting rod by cutting grooves in it and filling the notches with coloured pebbles, shells or bones. But Muslim mosaic-work in foliage and geometric patterns was the direct offspring of the art of damascening *(Koft-gari)*. The artistic smiths of Damascus gained for this kind of work the name of damascening from their city's name; the beauty of their decorated sword-blades, sheaths and metallic shields,—on which lines were cut and then gold, silver or copper thread beaten into the hollows and the surface smoothed,—was world famous. The finest and most delicate mosaics of the later Mughal period at once remind us of damscening, though that style of metal work had ceased in its home city when Timur conquered Damascus and expelled all its sword-smiths.

In Muslim art, green was considered as a holy colour, the symbol of Khwaja Khizir, the type of human revival after death; but that was in India only. Elsewhere, in Islamic lands, black was adopted by the Abbasides, cobalt-blue was copiously used in some other countries, and so on. The Hindus lacked the instinct for this artistic blending of sober colours; with them the loud colours red and ochre (yellow) predominated. Hence, the range of choice was far more extensive and effective in the Islamic colour-scheme than in the Hindu.

In fact, refinement of taste or delicacy of touch is the supreme merit of Islamic decorative art as it was developed in India under the great Mughals. A faultless eye guided their master-architects in the choice of colours, the size of the pieces to be inlaid, and the economy of the material. Hence, Hindu decorative art, by contrast, shows a certain exuberance, love of exaggeration, almost grossness. Even their best specimens, such as the carved ceilings of the Dilwara temple on Mount Abu, do not suggest the same feelings as the marble lattices of Fathpur Sikri or Sikandra, though both were done by Hindu craftsmen.

ARTISTS AND ARTISANS OF MUGHAL INDIA

The list of the builders of the Taj Mahal throw illuminating light on the different races that joined hands in producing this masterpiece of architecture. My authority is a Persian manuscript named *Diwan-i-Afridi* (Khuda Bakhsh Library). According to it, the following master-artisans were employed in its construction:

1. Amanat Khan Shirazi (a Persian), writer of the Tughra inscriptions, who came from Qandahar.

2. *Ustad* (i.e., master or head) Isa, a mason, a citizen of Agra.

3. *Ustad* Pira, a carpenter, a resident of Delhi.

4-6. Banuhar, Jhat Mal and Zorawar, sculptors, from Delhi.

7. Ismail Khan Rumi (i.e., a Turk from Asia Minor or Constantinople), the maker of the dome and the scaffolding *(dhola)* on which the dome was built up.

8. Ran Mal, Kashmiri, who laid out the garden.

The planning heads or artists properly so called were Persian or Turk, while the actual execution was carried out by Indian artisans, who also deserve credit for their faultless workmanship. In the detailed decoration, the mosaic-work was done by Indian workmen who should be called jewellers rather than stone-cutters. They were artists of a high order, though not designers of originality. The *pietra dura* work, a minor ornament, is ascribed by European travellers to Austin of Bourdeaux, a Frenchman, of whom we have no other record.

The world was ransacked in collecting the stones of different colours employed in the Taj. Our Persian authority thus describes them:—*Cornelian* from Qandahar, *lapis lazuli* from Ceylon, *Onyx* from "the upper world" (?), *patunja* from the river Nile, *gold* (stone?) from Basra and the sea of Ormuz, *Khatu* from Jodhpur, *ajuba* from the Kumaun hill rivers, *marble* from Makrana, *mariama* from Basra, *badl*-stone from the Banas river (in Rajputana), *yamini*-stone from Yemen in Arabia, *mungah* from the Atlantic Ocean, *ghori* from Ghorband in Afghanistan, *tamra* from the river Gandak in Bihar, *beryl* from the hill of Baba Budhan, *musai* (stone of Moses) from mount Sinai, *gwaliari* from the river near Gwalior, *red sandstone* from all directions, *jasper* from Persia, and *dalchana* from the Asan river.

Thus the perfect matching of colours in the inlay work, even to the minutest detail, was ensured.

THE LIFE OF OUR MEDIAEVAL ARTISANS

We can form a correct picture of the life and work of our craftsmen under the Mughal empire from the observations of the European travellers and the writings of the Persian historians of those times. The royal Court was the greatest patron of the artisans, because in that age, before the rise of modern large-scale producers and contractors, the Government had to be its own manufacturer for every kind of article it needed. Thus the workmen at the capital were assured of continuous, even hereditary employment, and the most promising talents in the provinces were attracted to Delhi by the prospect of the higher wages and recognition waiting for them at the capital. The Emperors (and the Delhi Sultans before Akbar) used to maintain palace-workshops, called *Karkhanahs,* and the nobles followed their master's example and employed the surplus trained artisans of the palace in their own mansions for their requirements.

The state of things in Akbar's reign is thus described, "In the year 39th of His Majesty's reign, 1595 A.D., there are in the imperial household more than a hundred offices (i.e.,

stores) and workshops, each resembling a city, or rather a Kingdom". (Abul Fazl's *Ain-i-Akbari*). Seventy years later, the French doctor Bernier observed in the Delhi palace how the system worked. He writes: "Within the Fort, large halls are seen in many places, called *Karkhanahs* or workshops. In one hall embroiderers are busily employed, superintended by a master. In another you see goldsmiths; in a third painters, in a fourth varnishers in lacquer-work, in a fifth joiners, turners, tailors, shoemakers; in a sixth manufacturers of silk, brocade.... and fine muslins." He continues,—

> "The artisans repair every morning to their respective workshops, where they remain employed the whole day; and in the evening return to their homes. The embroiderer brings up his son as an embroiderer, the son of a goldsmith becomes a goldsmith, and a physician of the city educates his son for a physician. No one marries but in his own trade or profession; and this custom is observed almost as rigidly by the Muhammadans as by the Hindus".

This rigid caste system among the artisans had a most beneficial effect in ensuring the best training of the son as an apprentice to his skilled father and the preservation of hereditary trade secrets. In addition, Akbar's policy of attracting to his service the best talents of every country and all his imperial provinces, enabled the Indian artisan to see in the royal *Karkhanah* the technique of the best foreign masters of that craft and improve his own skill. Thus, Abul Fazl is not flattering his imperial patron but telling the sober truth when he writes, that Akbar's liberal encouragement and personal interest in the development of the arts led to a great improvement in the quality of the Indian handiworks and a remarkable refinement of taste and aesthetic sense spread over the whole country. Indian culture in his age was not static, the people did not continue a stereotyped civilisation but marched onwards.

A story will illustrate here how the hereditary cultivation of an art in the same family leads to the storage technical skill and "secrets of the trade" without any loss or dispersion. When I visited Aurangzib's wife's tomb at Aurangabad many years ago, an old man, full of traditional lore, told me that this Deccani Taj Mahal was built by artisans imported from Agra and Delhi in the following way. The workmen took a large advance from the King, bought all kinds of building materials, and worked for some time, and then one morning they were found to have all disappeared without leaving any trace or store of unused materials on the ground. A hue and cry was set up against these masons, but they could not be captured. The building work was suspended.

And then after ten years, it was reported that those workmen had come back to their old huts. The governor summoned them to explain their conduct and threatened them for having cheated him out of Government money. They replied, that there had been no fraud and that they had done a necessary thing of their craft. For buildings meant to endure for ages, the mortar, lime and other materials (including spices) must be carefully mixed and the mixture left buried in covered pits undisturbed for ten years, before the chemical action is completed and the mortar becomes fit for cementing stones. The men opened the pits and showed the result, and then began the actual stone-laying. Thus the Rauza of Rabia-ud-daurani came to be built so as to stand the shock of centuries.

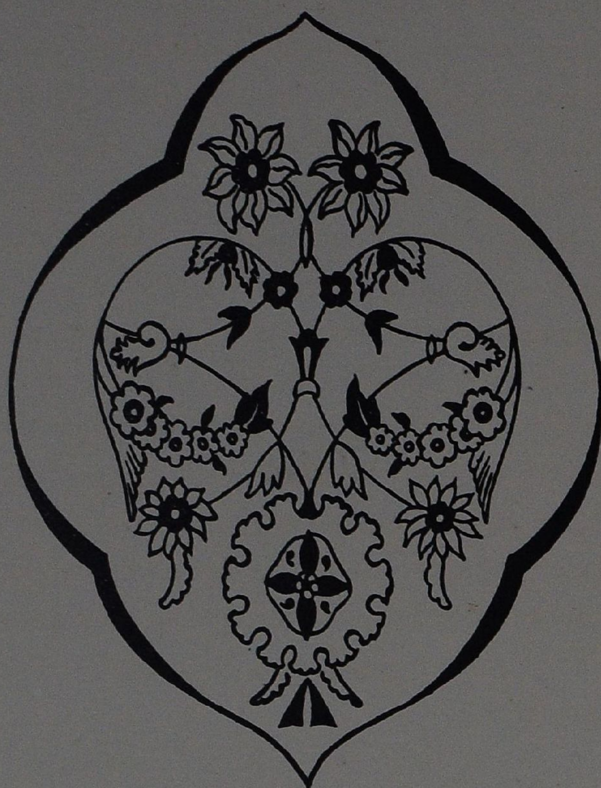


Glimpses Of Mughal Architecture

Text

by

S. K. Saraswati



Background

The Mughal monuments are more well known in the outside world than any other example of Indian architecture. This is not without reason. The purposeful buildings of Fathpur Sikri combine in their red sandstone lineaments a strength and grace hardly equalled in any other monument of the like order. The grand mausoleum buildings, such as the tomb of Humayun at Delhi, the tomb of Akbar at Sikandra, that of Itimad-ud-daulah at Agra and the world-famed Taj Mahal have each its own characteristic features of elegant design and luxurious embellishments inspiring the visitor with feelings beyond the expression of words. The houses of worship, like the spacious *Jami masjids* at Fathpur Sikri, Agra and Delhi, and the exquisite private chapels as the two *Moti masjids* in the latter two cities are each distinguished by a sense of effective design and proper accent and modulation in conformity with its purpose. The beautiful palaces of the Agra and the Delhi forts, superb and graceful in the extreme, conjure up a vision of the past splendour and the magnificently luxurious life of the Grand Mughals. These buildings react on the different human sentiments in a strangely fascinating manner and it is not surprising that they work like irresistible charms attracting visitors from far and near. Their situation on the important highways of communications has added to their appeal and their concentration within a comparatively restricted area has made a study of the monuments easier and more convenient. These facts are, no doubt, potent contributory factors to the fame of the Mughal monuments. Moreover, the Mughal monuments, by the clarity of their designs and the lucidness of their exquisite decorative embellishments, have a stronger appeal to the foreigners who can understand and appreciate them more easily. Without any subtle and mysterious content they are more human and it is not surprising that their appeal is universal. It is this distinctive character that has made the Mughal monuments famous throughout the world.

It has been usual to treat Mughal architecture more or less as an exotic growth, as something apart from India. Among the various factors that contributed to its making, the two that are often stressed and emphasised are the ideas and traditions imported from Persia and the benevolent patronage of the august emperors. The part that these two factors played in the growth of the Mughal architectural style cannot be seriously denied. But do they constitute, by themselves, the most fundamental elements in the history of this grand architectural activity? Are they solely responsible for those characteristic qualities that have made the Mughal monuments so famous throughout the civilised world? Without intelligent patronage no great culture can expect to flourish, and a few of the Mughal emperors, with their inborn artistic taste and a sense for the beautiful, admirably fulfilled this condition. It is also true that the architectural style, so assiduously reared up by a succession of enlightened sovereigns, began to decline as soon as court patronage was withdrawn. Should we be justified in stating thereby that the grand architectural style of the Mughals was dependent, wholly or mainly, on the wills and fashions of the emperors themselves? No amount of patronage can build up a great art unless its making is in its soil and environment.

In Mughal architecture the impress of Persia is clear as well as explicit. Ideas and techniques were freely borrowed, not for slavish imitation, however, but for judicious use and application. In such use and application they were acclimatised in such a manner that they would seem to be foreign on the Persian soil. On a final analysis, it may be briefly stated that the borrowings from Persia were entirely assimilated. If Persian ideas and techniques had been, solely or chiefly, responsible for the efflorescence of this brilliant style one is at a loss to understand why Persia has not produced a single monument that can aspire to equal the Taj Mahal in its magnificent design and superb form. Imported ideas, however grand, cannot build up a great architecture unless the indigenous capacities and achievements are of a very high order so as to appreciate and acclimatise them in a truly creative spirit and with a thorough understanding.

No great culture can expect to flourish in isolation. A significant culture, it should be remembered, is always a co-operative enterprise in which there is a constant intermixture of ideas and techniques from various sources. Such intermixture in the history of a great culture is like the intermingling of many streams and currents which are lost in the vast sheet of water making its way towards the sea. This vast sheet of water has, no doubt, its own independent and individual course; but one should not ignore the various currents that have helped to form it and to guide its direction. A self-contained and self-dependent culture is like a barren stream destined to a short and uneventful course.

The history of the Mughal architectural style is likewise the story of the intermingling of many streams and currents. Broadly speaking, two main currents can be recognised—one Indian and the other foreign, mainly Persian. Of these, the Persian current has been taken note of and, to a certain extent, unduly stressed as being mainly responsible for the excellence of the Mughal monuments. The Indian element has usually been ignored. The making of a great art, more especially of architecture, is naturally bound up with its soil and its emergence in complete brilliance depends on native capacities and adaptabilities. In the past, India had produced an architecture of great magnificence, of rich variety and high seriousness—an architecture that incontestably "forms one of the world's greatest styles". Its history is rooted in a dim past, as exemplified by the remains of the large and extensive brick-built cities of the Harappa civilisation of about the third millennium B.C. In these remains we can recognise already a mature tradition in building art with highly developed ideas in respect both of planning and of structural procedure. The mature tradition implies centuries of anterior practice the beginnings of which are now lost in oblivion.

Coming to the historic period, though the remains of the earlier phases are few, we have a brilliant record of architectural activity in India for nearly a millenium and a half till the establishment of the Muslim rule. The activity is recognised in the creation not only of religious buildings but also of secular. The remains of secular buildings are extremely scarce; but the orderly design and beauty of such buildings may be visualised with the help of their descriptions in literature, as well as from their representations in sculptures and paintings. They appear to have been mostly in impermanent materials, like wood, etc., a fact which is responsible for their almost total obliteration. But the excellent skill of the Indian builders in operating and manipulating such rather insignificant materials for raising up highly purposeful as well as beautiful buildings of the secular order is clearly evident even in the very few such representa-

PLATE IV.



FATHPUR SIKRI: SALIM CHISHTI'S TOMB: Coloured Border around Dadoes upon Interior walls.



FATHPUR SIKRI: THE MAHAL-I-KHAS-KHWABAGH: Coloured Border around Recesses, etc.



FATHPUR SIKRI: SALIM CHISHTI'S TOMB: Coloured Border around inner Entrance to the Shrine.

tions that we have got. The tradition in such impermanent materials was so strong as to leave its impress on the architecture in stone or brick. In spite of the absence of actual remains, the tradition may be said to have a continuous history right up to the present day, and is clearly manifest in the mediaeval Rajput palace architecture which we have to discuss in detail when dealing with the evolution of the Mughal architectural style.

An oriental mind thinks more of his religion and his god than of himself and hence the desire to build a permanent habitation intended for religious purposes is stronger in his mind. It is for this that the change from the perishable to the more durable materials occured much earlier in respect of religious buildings than in respect of those meant for domestic and residential purposes. The custom of fashioning shelters and shrines out of the rock, either by enlarging a natural cavern or by excavating anew, appears to have been in vogue in every country, especially in the primitive stages. In India this primitive practice takes the shape of a brilliant movement that goes on uninterrupted for a period of more than a thousand years. This creative movement has bequeathed to us a series of architectural forms that may be found to have important bearings in the history of Indian architecture. Bold in conception, rich and varied in detail, these caves, with their elaborate and intricate executions and their wealth of sculptures and other decorations, exemplify the inherent Indian genius for vigorous planning and perfect skill in stone-cutting in minute and exquisite detail. From a long practice the Indians boldly directed this mode to the rearing up of enormous shrines, by cutting the rock both inside and out, as free-standing monuments in space. The great Kailasa at Ellora represents such a stupendous creation, a whole temple complex entirely hewn out of a vast mass of rock, which on account of the richness and magnificence of its execution with every feature pulsating and vibrating so to say, has justly been described as the "world's greatest rock poem".

India has also been noted for her splendid monuments of the structural order. The vast sub-continent has been famous for excellent varieties of building stone, while the rich alluvium of the plains supplies a convenient material for bricks which, when burnt, assume a warm red texture. The use of bricks for structural purposes is very ancient in India. The extensive ruins of the Indus cities indicate a highly advanced knowledge of the methods and principles of brick-laying even in those very remote days. The use of this material continued through the centuries and in such use of bricks and in their decorative application the Indians have hardly been excelled. The use of stone has also been known from rather early days. But the employment of sized and dressed stone for building purposes began on a large scale in the Gupta period, roughly from the fourth century A.D. With a gradual advancement of the technique and methods and a growing mastery over the principles of construction architecture in India was rationalised and all through the period till the Muslim conquest there was noticed a prolific building activity, in stone as well as in brick, that found expression in the creation of grand and lofty temples in different parts of the country. Various styles and types of such temples have been recognised, each distinguished by its own individual characteristics. The majestic temple of Lingaraja at Bhuvanesvara, the stupendous Sun temple at Konark, the magnificent temple of Kandarya Mahadeo at Khajuraho, the graceful Udayesvara temple at Udayapura, the celebrated Sun temple at Modhera, the vast Kesava temple at Somanathpur, the Brihadisvara temple at Tanjore or such other temple establishments in South India, to name only a few, are each a marvel of building art of which any country would feel proud.

The Indian builders were great adepts in the handling of their materials. Their skilful manipulation of materials and their ingenious devices to meet the various structural problems have been found to be admirably effective through centuries. They had also an innate sense for good design in conformity with the purpose of their buildings. Every notable building is characterised by a balance and harmony, combined with a structural propriety, not only in its planning but also in its every lineament. In decorative embellishments the Indian builders showed also a wonderful aptitude, and this is clearly manifest as much in the pleasing distribution of lights and shades, horizontally as well as vertically, as in the application of rich and magnificent carvings. In spite of this love for decoration and horror for empty space, ornament has always been kept subservient to the structure so that the clarity of the monument has seldom been impaired. By its stately appearance, its effective distribution of lights and shades, its elegant and graceful carvings, and, above all, by the majesty and dignity of its conception, the Indian temple occupies a conspicuous place among the notable monuments created by human endeavour. It fully reveals the Indian genius for building art and represents the legacy of a rich and vital tradition, assiduously built up through centuries of activity and accumulated experience, a heritage that is not likely to be forgotten very easily.

Towards the close of the twelfth century Islam got a firm foothold in Northern India and by the beginning of the fourteenth, Southern India was also overrun. India was confronted with a new religion and a new culture, alien in temperament as well as in spirit. The contrasts are so striking that at first sight they might seem to preclude any real cultural co-operation between the two. They appear to be too formidable, particularly in view of the recent facts of repeated military aggressions led by Islam and their ruthless and wanton destruction. In the past, India had experienced many such rude shocks from the north and the west. Indian civilisation bore these shocks with a wonderful tenacity and vitality, drew fresh inspirations from alien contacts and continued its own course practically undisturbed. Islam entered India from Afghanistan and Persia. In the history of culture Persia had been playing a dominant role, along with India, from time immemorial. From millenniums before Christ these two countries are known to have fruitful cultural contacts and together they made significant contributions to the history of Asia as a whole. The cultural relations have, unfortunately, been submerged by the harrowing tales of conflicts. To the student of human civilisation the cultural co-operation between the two countries, even though largely unconscious, has been more important than the belligerent activities which, to a certain extent, have dimmed our vision of history.

Our space is too limited to allow a detailed discussion of all the points of cultural contacts between India and Persia along the vast panorama of history. The contact, so far as available data go, is already perceptible even in the third millennium B.C., and from that time onward stray, but significant, evidences indicate a constant and creative cultural exchange between the two regions. In such cultural contacts each is found to have made significant achievements. Art in each of these countries acquired substance and individuality the fundamental character of which the establishment of Islam could hardly change or alter.

Lying between India and Persia Afghanistan formed the meeting ground where the two cultures interpenetrated and overlapped. In the Maurya period this region formed politically a

part of India and culturally remained so till a rather late period. In religion as well as in art the country showed marked Indian elements, along with the more eclectic tradition of the west which she received through Persia. There were significant phases when Indian influences were the strongest as may be evidenced in the extensive expansion of Buddhism throughout the country and in the remarkable ivory sculptures from Begram which were essentially Indian, physically as well as aesthetically. It was through Afghanistan that Buddhism spread to the eastern provinces of Persia and Dr. Arthur Upham Pope has ably demonstrated how Indian ideas in art and architecture migrated to Persia through this route and achieved structural entities under the technical ingenuity of the Persian builders. Indeed, many of the fundamental forms in Persian architecture, such as the pointed and tre-foil arches, the transverse vault, the octagonal form of building, the dome, etc., originated in India, but mainly as ideas and suggestions which found practical realisation through the technique of Persia. " In short ", as Dr. Pope observes, " India has proposed and Persia disposed, but what India gave she received back again in a new form that enabled her to pass to fresh architectural triumphs ".[1]

With the coming of Islam India and Persia were again brought nearer, though at first in a rather brutal way. The contrasts between two alien religions and cultures seemed more marked, and accentuated further by fanatical outbursts on the part of the invaders. One should not forget, however, that Aryan kinship in language and custom binds the two countries which for a long time past had collaborated in a fruitful manner and developed, to a certain extent, a common understanding. When the contrasts and differences are mediated by such factors as above, it is quite likely that when the belligerence and fanaticism of the early conquerors had calmed down there would be reached an equilibrium that would make possible, again, another brilliant phase of cultural co-operation. The new impact, hence, instead of extinguishing Indian architectural traditions, opened the way for the infusion of new energies and for new architectural aspirations.

In the early days of Islamic rule in India the Muslim rulers had perforce to use not only ready-made materials despoiled out of Indian temples, but also to depend on Indian builders and craftsmen for the erection of their earliest monuments. A conquering army naturally did not include artists, builders and craftsmen, and when after annexation and settlement following conquest the new rulers felt the necessity of raising up mosques for their worship they necessarily turned their eyes on the old temples of the unbelievers for securing ready-made materials and employed the builders and craftsmen, who or whose forefathers had built up those structures, for dismantling them and erecting, with those materials, the buildings of the new faith. Again, certain features were common to both forms of architecture, whether Hindu or Muslim, in spite of the fundamental differences between the two in intentions and purposes. We may cite, for instance, the plan of the open court encompassed by colonnades or chambers, which is characteristic of many Hindu and Jaina temples, as well as of every Muslim mosque. Such Hindu and Jaina temples as were built on this plan could thus be easily and profitably transformed into the mosques for the faithful with only slight and minor alterations. This is what the Muslim rulers did in the early days of their occupation, and that also with a remarkable skill. The first Quwat-ul-Islam mosque at the Qutb, Delhi, represents one of the most instructive examples

[1] Arthur Upham Pope, Some inter-relations between Persian and Indian architecture (*Indian Art and Letters*, Vol. IX, 1935).

of such a case. The Muslim rulers who came into contact with the Indian builders and their traditions found them extremely useful and efficient, and interfered but little, except for supplying the necessary guidance and supervision to ensure the observance of the basic principles of the Islamic prayer-house.

When the Muslim power was firmly established in the country the rulers imported experienced builders and craftsmen from the west, mainly from Persia. The tradition that they brought was based on the accumulated experience of centuries in which, as already observed, India had also played not an insignificant part. The two traditions were thus again brought together and were destined to build up a new and individual style of Islamic architecture, which was as much Islamic as Indian. Indo-Islamic (Indo-Muslim), or Indian in its Islamic manifestation, would be the correct description of this new architecture.

Islam had everywhere showed a pliancy in adopting the styles of the various peoples among whom they had settled. In India also similar happenings may be recognised. The age-old collaboration and consequent common understanding in the field of culture between India and Persia mediated all differences engendered by alien religions, and the Indians also showed a remarkable adaptability in mastering the superior technique and principles of construction which the Islamic architectural tradition brought in its train. When the fury of an alien impact subsided, it is natural that a spirit of co-operation and collectivism prevailed leading to a happy fusion of the alien elements and the birth of a national style of architecture in which it would be futile to assess, separately and individually, the Indian and the Islamic contributions. It represents truly an art of the soil to which both the Hindus and the Muslims belonged.

Yet, the broad features of such contributions may be briefly set forth for a correct appraisal of the new style. In this respect we can do no better than to borrow freely from Marshall[2] and Percy Brown[3], who have studied this problem with great interest and with keen insight. In the fusion of the two traditions (the Indian and the Islamic) each was so circumstanced as to make a notable contribution to the general stock of knowledge on this subject, one, in the matter of materials, the other, in that of construction. The Indian architects had, for many centuries, been engaged on the construction of lofty temples of exquisite design, and to their artistic abilities the conquerors gave undoubted credit. The new architecture thus absorbed, or inherited, manifold ideas and concepts from the Indian, so many, indeed, that there is hardly any form or motif of Indian architecture which, in some guise or other, did not find its way into the buildings of the conquerors. But more important than these visible borrowings of outward and concrete features is the debt which Indo-Islamic architecture owes to the Indian for two of its most vital qualities, namely, the qualities of strength and grace. In no other country are strength and grace so perfectly and harmoniously united as in India. These are the two qualities which India may justly claim for her own, and they are the two which, in architecture, count for more than all the rest. Through centuries of experience the Indians played grandly and magnificently with their materials, and the lesson was not lost even under

[2] John Marshall, The monuments of Muslim India (being chapter XXIII of *Cambridge History of India*, Vol. III, 1928).

[3] Percy Brown, *Indian architecture* (*Islamic period*) 1942.

the new regime. It is not surprising that India in the Islamic phase had produced more notable buildings than all the other countries, that came under the influence of Islam, put together.

But much as the Muslim architecture of India owed to the older schools, it owed much also to the Muslims themselves; for it was they who, in every case, endowed it with breadth and spaciousness and enriched it with new beauties of form and colour. The indigenous Indian technique, accustomed to the trabeate system of construction, had remained static for a long time. The tradition, however, remained as strong and virile, as is evidenced in the construction of numerous temples even in the period simultaneous with the Muslim invasions and also after. Islam brought with it not only an infusion of new blood, but also innovations gained from other lands, fresh principles and practices that had proved effective under all conditions. Persia, throughout the course of her history, had been the clearing ground of many styles and traditions and it was through Persia that these innovations and new elements reached India. The inter-relations between Indian and Persian cultures are well known and had already been noticed. So, through a long communion of ideas and concepts India experienced little difficulty in absorbing such innovations and practices and adapting them to the requirements of the new style.

Before the advent of Islam concrete had been little used in India, and mortar scarcely ever. Of the true arch assembled in the correct scientific principle the Indians had not been wholly ignorant, but they used it very seldom. The construction of a vault by radiating voussoirs the Indians also knew; but in spite of such knowledge, the trabeate system had been the prevailing order in India. In the countries with which Islam came into contact early in the days of its phenomenal expansion the arch and the dome, constructed on the true scientific principles, had been the keystones of construction, and became, so to say, almost ritualistic necessities with the Islamic buildings. Concrete and mortar were also employed freely by the Islamic builders and became two of the most important factors of their constructions. Thanks to the strength of their binding properties, it was possible for the new builders to span wide spaces with their arches, to roof immense areas with their domes, and in other ways to achieve effects of grandeur such as the indigenous Indian tradition had never dreamt of. Though in their newly adopted styles the Muslims frequently perpetuated the trabeate system of construction under pressure of the persistent Indian tradition, it was the arch and the dome which they always regarded as particularly their own and as symbolic of their faith. The Indians, under the guidance of the new spirit, were not slow to appreciate the merits and advantages of the new methods and principles and adapted themselves accordingly.

Under the impact of Islam new forms and features and decorative ideals were also introduced, thus enriching Indian architecture as a whole. Among the characteristic features which Islam was responsible for introducing, mention should be made of the *minar* and the *minaret*, the pendentive and the squinch arch, stalactite and honey-combing, and the half-domed portal. A few of these were already familiar to the Indians, though sometimes as mere ideas, and they became practical structural propositions under the guidance of the Islamic masters. In the decorative aspect of the buildings there was also a new and significant direction. The decorative scheme of an Indian temple abounded, among other floral and diaper designs, in figure sculptures, bold and fully plastic in effect. Such figure carvings were, however, repugnant

to the ideas and tenets of Islam. Elaborate decoration and brightly coloured ornament were at all times dear to the heart of the Muslim, and in both these spheres he introduced striking innovations. The rich floral designs of the Indian artists he supplemented with flowing arabesques, or intricate geometric devices of his own, and interwove with them (as only a Muslim calligraphist could do) the graceful lettering of his sacred texts and historical inscriptions. Nor was it enough that his buildings should be beautified with a wealth of carvings executed in stone, brick or plaster; the Muslim required colour also and colour he supplied by painting or gilding, or by employing stones of various hues to accentuate the various architectural features. Later on, by the more laborious process of tesselating and *pietra dura,* he reproduced the designs themselves in coloured stones and marbles. Still more brilliant were the effects he obtained by encaustic tiling, which he at first used sparingly and in a few colours only, but later on without restraint to embellish the whole building with a glistening surface of coloured enamel.

The fusion of Indian and Islamic architectural traditions has justly been described as a kind of biological fertilisation leading to the birth of a new school of Islamic architecture, rightly called Indo-Islamic or Indo-Muslim. The Mughal architectural style represents the latest and ripest form of Indo-Muslim architecture, and, at the same time, its grandest and most magnificent expression. The accomplishments of Mughal architecture have, hence, to be set against centuries of consecutive achievements in India, whether in the Islamic phase or in the pre-Islamic. From this perspective alone one can fully comprehend the greatness of Mughal architecture and its place in the life of the Indian people. As we proceed, its links with the older architectural tradition will become apparent. It developed through a process of correct assimilation of the Indian and the so-called Islamic, i.e., the Persian traditions, and the beauty of its most significant monuments is found to depend on a harmonious blending and fusion of the two. It represents a truly national art which declined when the rigid application of the ideas and tenets of Islam sought to eliminate and extinguish the Indian inspiration.

BEGINNINGS

With the advent of the Mughals Indo-Muslim architecture reaches a unity and completeness which make the story of the architectural style that developed under their august patronage peculiarly fascinating and instructive. The Mughal emperors were keen lovers of nature and art, and their personality and individuality were, to a certain extent, reflected in the art and culture of their time.

In 1526 A.D., in the historic battle of Panipat, Babur, a Chaghatai Turk descended on the father's side from Timur and on the mother's from Chingiz Khan, made himself master of Delhi and Agra by defeating Ibrahim Lodi, the nominal heir to the much shrivelled Delhi Sultanate. It was this significant event that laid the foundation of the empire of the "Grand Mughals". The first battle of Panipat merely began the task which was a stupendous one. For a period of thirty years the fate of the Mughal dominion in India was indecisive, and darkened by a bitter contest for supremacy between the Mughals and the Afghans. The contest reached its climax when Humayun, son of Babur, was obliged to flee from India leaving his new dominion to his victorious Afghan rival, Sher Shah Sur. Sher Shah was a remarkable man who strongly organised the administration with a view to consolidate the Afghan supremacy. But his untimely death left the country again in disorder and his successors were not capable enough to cope with the situation. This state of disorder ended when in 1556 A.D., in the second battle of Panipat, Akbar, son of Humayun, won a decisive victory which brought to a close the long-standing Mughal-Afghan contest, and started the Mughals on their career of expansion. The second battle of Panipat marked the real beginning of the Mughal empire.

The state of uncertainty in the days of Babur and Humayun, hence, was not favourable enough for any outstanding contribution to the development of art and culture. Babur himself was a remarkably dynamic personality—a fearless soldier undaunted by adversity, an accomplished writer, and a born aesthete with a keen sense and perception for the beauties of nature and art. After the fall of the Tughluqs, the conditions in India were not conducive to the pursuit of any ambitious building project and few edifices of any importance had been built. The buildings of the earlier period, left to neglect for generations, were derelict, and the imperial city, a mere shell representing practically a necropolis of its former glory, had nothing to commend to the artistic taste of this shrewd critic. Babur, no doubt, praises the remarkable dexterity and skill of the Indian workmen and was highly impressed by the architectural grandeur of the city of Gwalior, particularly the palaces of Man Singh and Vikramjit, which he says, were "singularly beautiful, though built in different patches and without any regular plan". It is this lack of regularity and symmetry in the design of the Indian buildings that strongly re-acted on his sensitive mind and he expresses his dissatisfaction in no uncertain terms. With the Mughals, strict formality and balance represented essential qualities of a good composition, and any deviation would readily offend their inherent artistic taste. Hence, though admiring the manipulative skill of the Indian builders and their excellent workmanship, Babur failed to be moved by what he saw of Indian architecture at that time.

In spite of his strong antipathy for India and for things Indian, Babur is said to have undertaken several building projects in India of an ambitious order involving the employment of numerous workmen at Agra, Dholpur, Gwalior and other places. In his Memoirs he says that " 680 men worked daily on my buildings in Agra, . . . while 1491 stone-cutters worked daily on my buildings in Agra, Sikri, Biana, Dholpur, Gwalior and Kiul ". The number of workmen employed would naturally indicate the extensiveness of his schemes, the style and character of which are, however, difficult to determine. The majority of them appear to have been confined to the laying out and erection of pleasaunces, pavilions, baths, fountains, etc., rather than of palaces and public buildings. A *baoli* of great magnificence which he excavated in 1526 within the Lodi fort at Agra he describes at some length, but of the mosque that he built there at about the same time he complains that it " is not well done, it is in the Hindustani fashion ". Nor do the other mosques, that are attributed to him, possess any distinctive architectural significance. In view of his strongly expressed dislike of the state of building art in India he is also reported to have invited, from Constantinople, several pupils of the celebrated Albanian architect, Sinan, for helping him in his building schemes. It is unlikely, however, that such an enterprise ever materialised, for the simple reason that there is not a single trace of Byzantine influence on any of the Mughal buildings. The report truly reflects, however, the workings of the mind of Babur with regard to the state of architecture in India and is a clear proof of his preference for foreign ideas and inspiration to those of the country which destiny has allotted to him.

In spite of the extensive and ambitious nature of Babur's building projects, hardly any monument, definitely attributable to him, has survived today. It is said that his schemes, mostly consisting of the construction of pleasure gardens, pavilions, etc., had no religious or sentimental association. The causes of the disappearance of his monuments, however, seem to be otherwise. We have already noted his inherent dislike of India and of her building art. With such a supercilious attitude for the country, and for the people and their culture, it is difficult to initiate any creative art movement. Hence, in spite of his high aesthetic tastes, Babur's supreme contempt for everything Indian was not conducive to the growth of an art school under his patronage. Babur depended too much on imported ideas and inspiration and it is significant that what he initiated in the art of building had been swept away. The inexorable hand of time played its part, no doubt; but a more potent cause of the total obliteration of his buildings was perhaps the fact that the ideas and tradition which he sought to impose had no roots on the soil of India, or in the life of the Indian people. A change of attitude is necessary for any outstanding architectural style to grow and be firmly footed on the Indian soil and in the mind of the Indian people. This was supplied by the liberal and catholic views of Babur's grandson, Akbar, who, with his broader outlook, was responsible for outstanding and significant contributions to the growth and development of the Mughal architectural style. Objectively, it may be truly said that Babur left no impression whatsoever on the Indian building tradition.

The unfavourable political circumstances also did not afford much scope and opportunity for any outstanding architectural activities during the reign of Babur's unfortunate son and successor, Humayun. Son of an aesthete father and himself aesthetically inclined, Humayun undertook, during the early part of his reign, the building of a new city at Delhi, to be called Dinpanah (World Refuge), as " the asylum of the wise and intelligent persons ". It was to consist

PLATE—V.



SIKANDRA : TOMB OF AKBAR : Detail of Soffit of Arch, Vestibules.

of "a magnificent palace of seven storeys, surrounded by delightful gardens and orchards of such elegance and beauty that its fame might draw the people from the remotest corners of the world." The *Humayun-nama* of Khondamir gives a graphic account of the laying of the foundation stone of this city, the first of the Mughal capitals, so to say. "The walls, bastions, rampart and the gates of the city" are also reported to have been nearly finished within a year of the laying of the foundation stone. But it is doubtful whether the city, as it was planned to be, was ever completed. Even if completed, it appears to have been hastily put up without any attention towards stability or architectural beauty. The troubled reign of Humayun would hardly afford scope for anything better. No remains are extant of this first Mughal capital, and it is possible that whatever of it was finished owed its destruction to Sher Shah. The two surviving mosques of Humayun's reign also show no original or outstanding features.

With regard to the achievements of the first two Mughal emperors, Babur and Humayun, in the field of architecture we have an admirable summing up by Percy Brown. He says:

"The material records which have survived of both Babur's and Humayun's contributions to the building art of the country are therefore almost negligible. On the other hand the indirect influence of their personalities and experiences on the subsequent art of the country cannot be overlooked. Babur's marked aesthetic sense, communicated to his successors, inspired them, under more favourable conditions, to the production of their finest achievements, while Humayun's forced contact with the culture of the Safavids is reflected in that Persian influence noticeable in many of the Mughal buildings which followed." (*Cambridge History of India,* Vol. IV, p. 525).

There was an interruption in the Mughal regime by the interpolation of the reigns of Sher Shah Sur and his successors. This period of interpolation was also not without some significance in Mughal history. Sher Shah, we have already observed, was a striking personality and had he been spared long to finish his work he would have left a lasting impression on the subsequent history of India. His achievements were many, in spite of the short duration of his reign. In matters of revenue and administration he introduced important measures of reform and it was by applying such measures of the usurper, as Sher Shah was known to the Mughals, that Akbar was able to consolidate and broad-base his administration. Indeed, the phenomenal success of Akbar was, in a large measure, due to the policy and achievements of Sher Shah who may rightly be regarded as the fore-runner of Akbar the Great.

Sher Shah, as Percy Brown says, was "a man of marked constructional propensities and architectural ideals". At the time of his death he is said to have regretted that he was not spared to erect certain buildings "with such architectural embellishments, that friend and foe might render their tribute of applause." The few buildings that he has left are each of an exceptional character and clearly exemplify his ideals of, and attitude towards, building art. He arrived on the scene at a time when Islamic architecture in India, particularly the imperial style of Delhi, was already in a state of disintegration. An intelligent patronage and an aesthetic vision could only save this style from utter dissolution. Sher Shah, gifted with the imagination and outlook of a man of culture and vision, was fully aware of the needs of the time, and supplied the necessary conditions, as his building projects amply testify. These projects fall

into two groups of monuments, situated widely apart, one at Sassaram in Bihar, the scene of his earlier activities, and the other at Delhi, the seat of his imperial government. Both these groups were important, one as the brilliant culmination of an earlier tradition and the other as anticipating notable future developments. In the history of Indo-Muslim architecture Sher Shah's buildings are significant as supplying a link between the earlier Indo-Islamic style, as practised under the aegis of the Delhi Sultans, and the later, *i.e.*, the Mughal style.

At Sassaram and in its neighbourhood there is a series of five tombs, the majority erected, in all probability, during his life time. Each of these is a building of noble proportions and has a marked architectural character. They are all octagonal in plan, in continuation of the type of tomb, that was initiated at Delhi in the mausoleum of Khan-i-Jahan Tilangani during the reign of Firuz Shah Tughluq and so greatly favoured by the Saiyadas and the Lodis. Of all these tombs, the mausoleum of Sher Shah stands out pre-eminently as the *magnum opus*—a supreme conception of extra-ordinary architectural interest. The octagonal type of the funerary monument was initiated at Delhi and was characteristic of the imperial style of the Saiyad and the Lodi sultans. It is not a little surprising, therefore, that its most magnificent expression should be produced in a remote corner of Bihar, far away from the imperial capital. Sher Shah's tomb far excels the Delhi compositions in its bold and imaginative conception. The Delhi tombs belonged to a ruling power already approaching disintegration, and, in spite of their good qualities, they are expressive of the forces of dissolution. The tomb of Sher Shah, though based on the Delhi models, was a production of much higher aesthetic plane and is a fitting tribute to the power and imagination of his vigorous and dynamic personality.

Not a little of the romantic beauty of this grand mausoleum depends on its picturesque situation. It stands in the middle of a large quadrangular tank, 1400 feet in length and rises from a lofty square terrace, over 300 feet on each side, and with flights of steps descending down to the edge of the water. With the mainland the monument was connected by an elegant bridge, now ruined. The square terrace forms an ample court with a substantial domed pavilion at each corner. From the centre of this court rises the octagonal tomb building in three gracefully diminishing tiers ultimately crowned by a low and wide dome. The lowest stage forms an arcaded corridor round the funerary hall and has a pleasing effect with the graceful shape of the arches, three on each of its eight sides, the projecting eave supported on brackets, and the high crenellated parapet. The two upper stages are each relieved by means of pillared kiosks, one at each corner of the octagon, alternating with effective oriel windows. From the third stage, which actually forms the drum, rises the semi-spherical dome, the series of kiosks at its base "carrying the eye along its spreading curves to the massive lotus finial which crown the whole". The total height from the base to the finial is 150 feet and offers a splendid harmony with the dimensions of the base.

The tomb of Sher Shah has been described to be thoroughly expressive of Indian genius in building art. In its pyramidal elevation Havell has recognised the stamp of the earlier Hindu tradition. While there might be differences of opinion on this point, nobody can deny the boldness of its conception, the majesty of its proportions and the magnificence of its execution. The transition from the square to the octagon, and from the octagon to the sphere is smooth and harmonious and the manner in which the mass has been broken up

by the appropriate application of architectural details is admirable. Few buildings of the like order can surpass it in the chaste beauty of its line, in the dignified harmony of its proportions and in the effective distribution of its huge mass. It represents a great architectural conception and a supreme building achievement of sober and massive splendour of which any country might feel proud. The tide of humanity has drifted away from near the place and very few people have the opportunity to visit it. But one who cares to do so cannot but be impressed by the noble and massive monument in its remarkable setting. As Percy Brown says: "Those responsible for this architectural masterpiece were unquestionably gifted with phenomenal vision, for the spectacle of such a ponderous building, solid and stable in itself yet apparently floating on the face of the water, its reflections creating the illusion of movement and at the same time duplicating its bulk, is unforgettable". (*Indian Architecture: Islamic Period,* p. 87)

Sher Shah ascended the throne of Delhi at a time when, after a long period of inertia, the architectural activities at Delhi had been showing signs of a revival. A few buildings, erected during the first half of the sixteenth century, supply indications of a return to the more ornate architectural tradition of the Khalzis, in place of the simple and austere mode imposed by the Tughluqs. In the Moth-ki-Masjid, built about the beginning of the sixteenth century, the beam and the bracket of the Tughluq style was replaced by the recessed archway, characteristic of the Khalzi buildings. The Jamala mosque, built about 1530, indicates a further advance in the new direction. Among other innovations, the white marble lacing in ashlar masonry and the double-recessed arch with 'spear head' fringes in the outer one signify definite attempts to revive the modes of the older style. In these examples there may be recognised a new awakening which required a ruler with a vision and imagination to direct the activities into a strong and virile movement. This the architectural predilections of Sher Shah did, and the buildings that he erected at Delhi represent notable and purposeful creations full of import for the styles that followed.

With the assumption of imperial authority Sher Shah initiated at the capital a forceful architectural movement that is singularly expressive of his own versatile nature. He laid out a new citadel, called the Purana Quila (old fort), on the site of Indrapat, and around it he planned his capital. The Purana Quila, as the extant remains indicate, was intended to be a composition of considerable size and magnitude; but it is now a mere shell bereft of the palace buildings, pavilions and other edifices that it once contained. Two gateways and a part of the rampart walls now remain, together with a notable mosque building — one of the many elegant structures that once adorned the citadel. The massive rampart walls of rough and rugged masonry, along with substantial bastions, bold battlements, machicolations, etc., are expressive of robust strength, to which the gateways of dressed sandstone masonry, picked out with white marble and occasionally inset with blue glaze, offer a most significant and artistic contrast. The main entrance through the western gateway consists of an exceptionally elegant treatment, illustrative at once of massive vigour and refined grace. It is a prelude to the style of buildings that once adorned this highly purposeful citadel. The Quila-i-Kuhna *masjid,* the chapel Royal of Sher Shah Sur, which is the only monument that has survived, possibly on account of its sacrosanct character, offers a most significant key to the admirable qualities of the various buildings that Sher Shah erected within his citadel.

The Quila-i-Kuhna *masjid* represents the crystallisation of the awakened tendencies that we have already noticed in the Moth-ki-masjid and the Jamala mosque built in the early decades of the sixteenth century. The accumulated experience of about half a century, under the able guidance of a monarch of liberal and aesthetic bent of mind, resulted in the production of this mosque which has been aptly described by Percy Brown as "a gem of architectural design".

The Quila-i-Kuhna mosque does not represent a large or an ambitious composition. It has no cloisters, but simply consists of the sanctuary chamber, an oblong of 158 feet by 55 feet with a height of 66 feet, and a courtyard in front with an octagonal reservoir in the centre for the ablution of the worshippers. Nevertheless, the building is replete with elegant and instructive features. The Jamala mosque, built about fifteen years earlier, was the prototype on which Sher Shah's mosque was modelled. A comparison of the two will, however, reveal what a great advance was made in architectural form and design within a comparatively short period. The design and arrangements of the two, including the scheme of the facade, the division of the interior, the structural procedures, etc., are practically the same. But whereas the various elements and arrangements are in the rough in the Jamala mosque, they appear in finished and refined forms in Sher Shah's production. "Each architectural feature crudely fashioned in the Jamala mosque has been refined; improved, or amplified in order to fit it for its place in the finished production of the Quila-i-Kuhna. Sher Shah's Chapel Royal in the Purana Quila represents the culmination of its type" (Percy Brown, *Indian Architecture: Islamic Period,* p. 89).

In the Quila-i-Kuhna mosque all the elements and details have been carefully disposed and harmoniously balanced so as to make it one of the outstanding productions in building art. Its supreme excellence lies in the treatment of its facade which consists of five arched entrances, of excellent proportions, each within a larger recessed archway enclosed within a bold rectangular frame. The central archway is larger than the two flanking it on either side, and behind it rises the single dome of the flat Lodi type crowned by a fluted final. The sandstone fabric is enriched with white marble inlay and inset patterns in coloured glaze, and further relieved with mouldings, carvings and bracketed openings, all disposed over the frontage in good taste. The facade represents a singularly fine achievement in its elegant scheme and finished execution. Apart from its aesthetic character, it has also several features which are of some historical interest. The narrow turrets on either side of the central bay of the fronton with their fluted mouldings remind one of the stellate flanges of the Qutb Minar, while a similar pair at the corners of the back wall retain the characteristic taper of the Tugluq buildings. Apart from such associations with the past a link with the future may also be recognised in the slight drop or flatness in the curve of the archs towards the top, thus anticipating the so-called 'Tudor' arch of the Mughals.

The interior arrangement of the mosque building is also equally pleasing. It is divided into five bays corresponding to the five arched openings in front. The simple broad mouldings of the interior arches, the plastic treatment of the *quibla* wall and the effective proportions of the bays recall the elegant treatment of the frontage, and the various expedients employed for the support of the roof illustrate the inventive skill and technical assurance of the builders. In the centre the dome is supported on the usual squinch arch, while the intermediate bays with vaulted ceilings have a rare variety of stalactite with ornamental arches in between. The bays at the extreme ends exhibit novel and original features in the arrangement of a kind of cross-rib

and semi-vault that has been used for the support of the roof,—a technique that was evidently of an experimental nature. The Quila-i-Kuhna mosque, besides being a creation of high artistic standard in itself, is "pregnant with ideas, some of the past, others original", and contains "so many elements of tradition" and "promises of developments". It offers a clue as to the character of other buildings erected by Sher Shah within his citadel for the accommodation of his family and his court. Such buildings have been swept away, perhaps in the frenzy of restoration of the Mughals under Humayun. The Mughal architectural style began as a definite movement under Humayun's son and successor, the great Akbar, and it has been affirmed, possibly with some amount of truth, that Akbar received the inspiration for his own architectural projects from the group of buildings produced under the intelligent and enlightened patronage of Sher Shah, and that the style of his buildings was influenced, to a certain extent, by the strong and revivified architectural tradition that flourished at the imperial capital during Sher Shah's regime.

The death of Sher Shah left the country in a state of disorder and confusion. His second son, Islam Shah, succeeded him and ruled till 1554; but he had not the ability and wisdom of his father to hold together the rich patrimony which his father had left. Rather, his jealousy and suspicion of the prominent Afghan nobles created wide-spread disaffection and the situation was exploited by his rivals. After his death the circumstances became so acute that there appeared three rival claimants, each ruling his portion of the territory in defiance of the other. Humayun seized this opportunity to invade India, and, after defeating one of the rival Sur kings at Sirhind, occupied Delhi and Agra. Shortly after, he died from a fatal fall and his son Akbar, then only a boy of fourteen, was formally proclaimed at Delhi in February, 1556. The heritage, however, was of a precarious nature. Really, it was a legacy of difficulties, even greater than those encountered by his father in his early days. The Mughal sovereignty in India was at that time far from being assured. Akbar had to contend not only with the rival claimants of the Sur royal family, but also with a host of refractories and rebels. The young emperor faced the situation boldly and his victory in the second battle of Panipat proved to be decisive as iterating the restoration of the Mughals and as having planted the Mughal dominion firmly on the Indian soil. It was with this historic victory that the Mughal empire in India really began. Within fifteen years Akbar became the undisputed master of a far-flung empire, much greater than what his father had inherited, and had done more to consolidate the various heterogenous racial and religious elements of Hindustan.

It was with Akbar that the Mughal architectural style, as an individual and distinctive tradition, may be said to have begun. He undertook various building projects in different parts of his empire and was responsible for the initiation of a prolific building activity that was assiduously continued by his successors.

The Mausoleum of Humayun at Delhi which, as heralding a new movement, supplies an important landmark in the history of the building art of the Mughals. Erected by his widow, Haji Begam, during the early years of the reign of Akbar, it is one of the most striking monuments of Indo-Muslim architecture at Delhi. It was begun in 1564, eight years after the death of Humayun, and took eight years to be completed. The building itself is supported on a wide square platform, 22 feet in height, with gracefully arcaded

sides. The arches recall the Persian design and form and the piers are ornamented with inlays of white marble emphasising their graceful lines. Each archway of the platform opens into a small room for the accommodation of visitors. The mausoleum building occupies the centre of this arcaded platform and represents a square of 156 feet side with each corner chamfered and the middle of each side deeply set back. This arrangement lends to the building a pleasing effect of contrasting planes and deep shades, further variegated by white marble lacings to pick out each and every lineament of the noble structure. The design and elevation of all the four sides are essentially identical, the dominating feature on each face consisting of an enormous rectangular fronton, set back in the middle, accommodating a recessed archway, and with similar smaller archways in the embowed wings on either side. Above rises the white marble dome of every graceful contour, raised upon a substantial drum, and with a number of pillared kiosks, roofed by small cupolas, and slender turrets surrounding it.

The interior arrangements of the structure are equally pleasing. Instead of consisting of a single chamber, as has hitherto been the practice, we have a combination of octagonal rooms on a regular plan,—the largest one in the centre with a vaulted roof containing the cenotaph of the emperor, and a smaller one at each angle intended for those of his family, — all connected with one another by galleries and corridors. The entire building is laid within an enclosed quadrangle designed as a formal garden and approached by an imposing gateway in the middle of each of the perimeter walls. The idea of placing a tomb building within walled-in space is nothing new. But the credit of expanding the enclosure into a formal garden with paved walks, flowered parterres variously patterned, ornamental watercourses, avenues of trees, etc., was entirely that of the Mughals and the scheme first makes its appearance in the tomb of Humayun at Delhi.

We may quote from Percy Brown as regards the superb effect of this noble composition. "The exceptionally satisfying appearance of this building and the lucidity of its composition have been obtained by the skilful realization of all those qualities essential in a great work of art. The structural relations of the plan to the design of both the exterior and interior are manifestly logical......These factors together with the finished amassment of the various parts, each one elegant in itself but rendered more so by the propriety of its position, are responsible for the superb effect of this monument. Added to these are the perfection of its proportions, the interplay of its surfaces and planes, the shape and judicious distribution of the voids, the graceful but bold curves of the arches, and above all the grand volume of the dome...... Not a little of the artistic result is due to the materials employed, the red sandstone and white marble of which it is composed being admirably blended, and although some of the white lining is taut and even rigid such emphatic treatment conveys to the entire conception an impression of austere dignity not out of place in a structure of this order." (*Indian Architecture: Islamic period*, p. 93).

The white marble dome of Humayun's tomb shows also certain new features in its shape as well as in its structural conception. In shape it offers a significant contrast to the low-pitched and broad-based domes of the earlier styles. Its slightly constricted neck and high pitch with the finial rising directly from the apex without any intervening member have parallels in the fifteenth century dome of Timurid Persia, from which this new type of dome in India

appears to have been derived, though not exactly copied. On the structural side we find here for the first time the correct and logical application of the double dome, an expedient that is known to have been in use in Western Asia for a considerable length of time. The principle was, no doubt, known in India, as may be seen in the crude attempts in this direction in the tomb of Sikandar Lodi at Delhi. The Hindu architects also appear to have been familiar with the idea and we may refer to the double vaults used in the construction of the *sikhara* of the brick temple at Bhitargaon (Cawnpore district) referrable to about the fifth century A.D. In the tomb of Humayun the principle appears as a fully mature and rationalised structural conception and was evidently inspired by the technique and methods of the West Asiatic architectural tradition. A dome constructed on this principle consists of an inner and an outer shell of masonry with a hollow space in between, the inner forming the vaulted ceiling over the main chamber. It represents an effective structural expedient; not only does it reduce the load of masonry, but it also enables the ceiling to be placed in better relation to the interior dimensions of the hall to be covered, without in any way disturbing the proportions and aspiring elevation of the exterior.

The tomb of Humayun at Delhi strikes a new note in the order of funerary monuments in India. As already observed, it stands apart from the architectural conceptions of Akbar and in spite of new principles, wider possibilities and notable qualities, it failed to set a fashion immediately. The Persian character is clearly evident in the plan as well as in the elevation of the building. This is not surprising as Humayun, apart from his inherited Persian predilections, strongly imbibed the Persian culture due to his forced contact with the Safavid court of Persia. It is also recorded that the architect entrusted with the building of this monument was one Mirak Mirza Ghiyas, who was almost certainly of Persian origin. We may quote Percy Brown, again, for an assessment of the various elements that have contributed to the making of this noble monument:

" Perhaps the nearest definition of the architectural style of this monument is that it represents an Indian interpretation of a Persian conception, as while there is much in its structure that is indigenous, there is at the same time much that can only be of Persian extraction. Until now nowhere but in Persia had there appeared a dome of this shape and construction, solely in the buildings of that country had there figured the great arched alcove which gives such character to the facade, and nowhere else but in the royal tombs of that region had there been devised that complex of rooms and corridors forming the interior arrangements. On the other hand only India could have created such fanciful kiosks with their elegant cupolas, and above all only the skilled masons of that country could have produced such excellent stone masonry and combined it so artistically with the finer marble. In spirit and in structure Humayun's tomb stands as an example of the synthesis of two of the great building styles of Asia — the Persian and the Indian." (*Indian Architecture: Islamic period,* p. 93).

FOUNDATION

Unlike his predecessors, Akbar was resolved wholly to identify himself with India and to rule as an Indian sovereign, not as a foreign conqueror. He was the first of the Mughals to be born in India, and he considered himself to be an Indian, not a stranger like his grandfather with the eyes and heart turned towards the west. Moreover, Akbar had neither the fanaticism, nor the intolerance for other faiths and creeds that this desert religion usually engendered among its followers. His liberal and enlightened mind was discerning enough to recognise and appreciate the good qualities in other faiths and creeds, and he had the courage to honour and patronise merits irrespective of race or religion. The catholicity of his mind and views is reflected in all his works, political, administrative, as well as cultural. There was a new direction in the policy of the state, and that direction was an emphasis on the Indian point of view which the emperor himself strongly advocated. This new policy was responsible for the phenomenal expansion of the Mughal empire and for its consolidation and ultimate cohesion. He was inspired by the ideal of a united India, and this he strove to realise throughout his life. The splendid pageant of the Grand Mughals retained its substance and reality so long as this liberal policy was maintained. The Mughal empire had its real beginnings in the regime of this enlightened sovereign, and so also the composite Indian culture, known as the Mughal culture, including the art of building. The disintegration of the grand empire began as a result of the narrow and bigoted policy of Aurangzib who wanted to impose the Muslim point of view. The great Akbar fostered a brilliant architectural style on a correct understanding and assimilation of the various traditions and ideals, indigenous as well foreign. This forceful architecture also languished when, as a result of the pressure of Islamic ideals, there became manifest a gradual isolation from the traditions of the soil and a greater dependence on the imported, i.e. foreign, ideas.

Akbar was perhaps an unlettered person. Nevertheless, he was a man of profound culture, with a fine literary taste, a keen intellectual curiosity, a wonderful memory and a fine aesthetic discernment. During his long reign he initiated many ambitious architectural projects, and his creations bear the impress of his own remarkable personality and character. He was planning his structural projects simultaneously with the building of his father's tomb at Delhi. It is significant that this tomb stands alone among all other architectural creations of this emperor, and this fact would indicate that his policy and ideas in respect of building art were fundamentally different from those that are reflected in the tomb of Humayun. From his buildings it is clear that he did not intend to import a ready-made style from Persia. In conformity with his general policy he wanted the style he created to have an independent and Indian character. He found the Indian artists still maintaining the living tradition of their craft and was inspired with the idea of encouraging the indigenous systems in art and culture. Only when these proved to be wanting or deficient he turned to the traditions of other countries to compensate for the shortcomings of the indigenous system.

In the previous chapter it has been observed that Babur, in spite of his strong distaste for everything Indian, was highly impressed by the excellence of Indian workmanship in the art of

PLATE—VI.



SIKANDRA: TOMB OF AKBAR: Panel Over Door of Passage, Vestibules.

building. Akbar also recognised and appreciated the technical dexterity and skill of the Indian workmen and fully exploited them in his own architectural undertakings. It is this policy which lent to the Akbari monuments a specifically Indian character, as contrasted to the rather exotic appearance of Humayun's tomb at Delhi.

We may digress here a little to discuss briefly the splendid palace of Man Singh in the Gwalior fort which attracted the admiration of an inborn aesthete like the first Mughal emperor, Babur. This little digression is necessary, we think, as this palace offers an interesting clue to the character of the secular buildings erected by Akbar.

Man Singh, a Tomara chieftain, was ruling at Gwalior from 1486 to 1516 A.D. He was one of the most enlightened of the Hindu sovereigns of his day, and his able administration gave peace and prosperity to the state. He was a munificent patron of music and architecture, and his interest in the latter sphere is still evidenced by two beautiful palaces, of which the one, known after his name, has been recognised to be "one of the finest pieces of architecture in Northern India". Built at a time slightly prior to the advent of the Mughals, it illustrates, more or less, an indigenous style in palace architecture, and as we proceed, it will be apparent that from this style Akbar derived many useful ideas when building his own palaces within his fortified citadels.

This remarkable and interesting example of an early Hindu palace is situated on the eastern scarp of the rock on which the fort stands. Externally the dimensions are 300 feet by 150 feet with a height of more than 80 feet on the eastern side. The flat surface is relieved on each face by tall round bastions of a singularly pleasing design and crowned by cupolas with domes of gilt copper, as Babur once saw them flashing in the bright sunlight. Between the bastions and breaking up the skyline of the parapet there appear elegantly designed balcony kiosks. The facades are gracefully embellished with bold patterns, plastic as well as coloured. A singularly effective plastic design occupying the central division of the facade, consists of a range of arcades with foliated struts. The coloured ornament in blue, yellow and green glaze takes the shape of elegant bands of patterns with figures of men, elephants, tigers, birds, *makaras*, plantain trees, etc., and lends a charming and picturesque effect to the massiveness of the composition of the facades. "Nowhere", says Fergusson, "do I remember any architectural design capable of imparting a similar likeness to a massive wall". Much of this ornament has decayed and peeled off. Yet, it represents a grand and beautiful conception and we may quote from an Englishman, Sir Lepel Griffin, Agent to the Governor General for Central India. He saw it more than seventy years back and did much to retrieve it from the unsympathetic ignorance of the British military contractors who had turned the palace to a commissariat godown and disfigured its beauties to an extent that even the inexorable hand of time, or that of the successive ruthless invaders, could not do.

The palace, he writes, "was once a mass of architectural and coloured ornament from base to summit. Even in its ruined state, its fine projecting towers, open pillared central balconies and arrow-headed cresting, make up a most unique pile. Situated at a height of 300 feet above the level below, on the rugged rock, its pinnacles standing out against the sky, every artistic detail throwing others into relief, the entire frontage one mass of colour, and the domes

crowned with golden spires, the general effect must have been very fine". (Lepel Griffin, *Famous monuments of Central India*, pp. 48-49).

The Hathiya Paur, or the "elephant gate", attached to the southern end of the eastern frontage is in itself a product of high artistic merit and is in keeping with the striking design of the palace building. It consists of a handsome domed building with a massive bracket and with rich corbels, the bracket shape being, to a certain extent, masked by two semicircular bands of bold floral patterns The sides are effectively diversified by projecting balconies, perforated screen works, and particularly by two boldly projecting circular bastions, each roofed by a dome supported on a cluster of pillars. A masterly conception in itself, it is at the same time a highly purposeful building and in its artistic execution has seldom been equalled.

The interior of the palace building consists of two highly artistic open courts, each with a suite of rooms on its four sides. The courts are rather small in size, but in their exquisite designs and in their rich and minute embellishments they are perhaps unsurpassed. The smallness of their scale and the wealth of decorative detail, covering every available space, stand in significant contrast to the bold and massive conception of the exterior walls. It appears that these interior courts lacked the able guidance and supervision of a master architect who might have planned and executed them in conformity to the noble and dignified conception of the outside. They are more the work of an artist and decorator than of a builder endowed with the breadth of vision, required for the creation of effective and purposeful habitations. Yet, it contains many interesting features that are of a distinctly innovatory and ingenuous character. The main body of the palace is divided into two storeys with additional underground floors along the eastern retaining wall for providing cool comfort in the hot weather. The open pillared balconies in the uppermost floor overlook the open courts below and add relief to the harsh four-square shape of the courts. The ingenuity of the builders is shown in the different structural expedients employed for the support of the roofs, and the vault over a room in the south-east angle with ribs at the groins lends a charming effect to the interior. The different shapes and designs of the corbelled struts and brackets and their execution, the variegated shapes and the rich mouldings of the piers and pillars, the perforated screens of various patterns, the round and foliated arches, and the variously designed projecting eaves, including one of corrugated shape, are each a marvel of stone-carving, and the entire surfaces are covered with minute ornamentation in low relief and coloured glaze lending a most picturesque effect to the view of the interior. In spite of the smallness of scale, which had long been a deficiency in respect of the interior planning of a secular building, Man Singh's palace in the Gwalior fort furnishes us with a singularly pleasing conception, noble and dignified, and, at the same time, romantic and picturesque.

Let us now proceed to the architectural projects of Akbar. The regulation on buildings in the *Ain-i-Akbari* may serve as an effective prelude to the ideas of Akbar in this respect.

"Regulations for house-building in general are necessary; they are required for the comfort of the army, and are a source of splendour for the government. People that are attached to the world will collect in towns, without which there would be no progress. Hence His Majesty plans splendid edifices, and dresses the work of his mind and art in the garment of stone and clay. Thus mighty fortresses have been raised, which protect the timid, frighten the rebellious,

and please the obedient. Delightful villas and imposing towers have also been built. They afford excellent protection against cold and rain, provide for the comforts of the princesses of the Harem, and are conducive to that dignity which is so necessary for worldly power".

"Everywhere also *Sarais* have been built, which are for the comfort of travellers and the asylum of poor strangers. Many tanks and wells are being dug for the benefit of men and the improvement of the soil. Schools and places of worship are being founded and the triumphal arch of knowledge is newly adorned." (*Ain-i-Akbari,* English translation, second edition, Vol. I, p. 232).

The above clearly illustrates the practical nature of Akbar's architectural undertakings. All his projects were intended as much to serve utilitarian purposes as to display and emphasise the might and splendour of the government. He was the founder of several fortified royal residences each of which served as his capital during the period that the emperor stayed there. They have been designed, hence, in such a manner and scale as to accommodate the royal entourage.

The first of such royal residences to be erected was the fortress palace at Agra which was completed in eight years (1565-1573) at a cost of thirty-five lacs of rupees (seven crores of *Akbari tankas* as stated by Abul Fazl). It was built "under the superintendence of Muhammad Qasim Khan, the overseer of the buildings and ships". In plan the fort takes the shape of an irregular semicircle lined along the right bank of the river Jumna. The massive enclosure wall consists of a solid red sandstone rampart, nearly seventy feet high and one and a half miles in circuit—the first application of sized and dressed stone on such a huge scale. Contemporary records consider the construction of this enormous mass as a remarkable feat of achievement, and it is stated that "from top to bottom fire-red hewn stones, linked by iron rings, are joined so closely that even a hair cannot find its way into the joints". This massive fabric, with its embattled parapets, machicolations, string-courses, etc., has a solemn artistic grandeur, beautiful as well as effective for its purpose.

The Delhi gate, also known as the Hathi Pol, standing on the western side forms the principal entrance to the citadel. One of the earliest of Akbar's buildings (it is said to have been completed in 1566), its noble conception, at once fresh and virile, indicates the inauguration of a new era in the art of building. It is a massive structure designed on the usual scheme of an arched entrance flanked by two substantial bastions projecting from the rampart. The bastions are octagonal in shape and rise up boldly, each with an octagonal domed kiosk at the top. The interior of the gateway building consists of several commodious rooms for the accommodation of a substantial guard, while the back has a charming facade with arcaded terraces surmounted by domed pavilions and pinnacles. This imposing portal is disposed in several storeys, each bastion being divided transversely by a surrounding balcony on brackets that serves as the most effective line of interruption to the solid mass of the facade. The solids and voids are also disposed very skilfully; the lower storey has no openings, except for the arched entrance, in keeping with its character requiring strength and stability, while the upper has arched recesses, one on each side of the octagon, thus imparting to the building the necessary appearance of depth. The entire surface is richly decorated by inlay as well as in coloured glaze. The patterns in

white marble inlay on the arcades and panels, both inside and outside, are the most effective against the warm red texture of the sandstone fabric. The patterns in coloured glaze consist of winged dragons, elephants and birds, in defiance of the canonical injunction against the representation of living forms, and strikingly illustrate the liberal spirit of toleration that marked all the activities of this enlightened emperor.

There is no doubt that the creator of this impressive gateway was imbued with a fresh spirit, at once free and unrestrained. Its noble and dignified character is universally admitted. "From every point of view a most attractive appearance has been given to the structure by means of arcades, arched recesses and other architectural and decorative features, so disposed as to add greatly to the effect but without detracting from its real purposes as an essential part of the fortification....... The buildings of the Akbari period are remarkable for their animation which reflect the spirit of the time, but few are so vibrant in their character as this monumental gateway at Agra fort". (Percy Brown, *Indian Architecture: Islamic period*, p. 96).

Abul Fazl states in the *Ain-i-Akbari* that within the fort the emperor built "upwards of five hundred edifices of red stone in the fine styles of Bengal and Gujarat". This statement is significant. We are familiar with Akbar's versatility and his desire to build up a great architectural style, distinctively Indian in character. For this he wanted gifted artists from all parts of Northern India to share in his own architectural undertakings, and assembled them together to work under his master builders who, under his enlightened leadership, were inspired by the same spirit of catholicity. Thus was developed a unified and national style of building art in which each distinctive tradition, imperial as well as provincial, played an important part. Even the distant regions were not overlooked if they had some contributions to make. The stamp of the Gujarati tradition is clear and explicit in the predominant indigenous system of construction of the trabeate order, and also in the exquisite stone carvings, both of which gave such a definitive character to Akbar's monumental creations. The contribution of Bengal is not so emphatic, at least in his extant monuments. From Abul Fazl's categorical statement this province also appears to have played not an insignificant part in the architectural undertakings of Akbar at Agra. Only a fragment of Akbar's numerous buildings within the Agra fort has survived today, and the contributions of Bengal might have been swept away along with the obliteration of many of Akbar's buildings. The name Bangali bastion still persists, but the building is well nigh in ruins and it is difficult to ascertain its real character. It appears more than probable that the Bengali hut-shaped roof, with elegantly curved eaves, which forms a prominent characteristic feature in later Mughal monuments, made it first appearance at the capital during Akbar's regime, and established itself throughout the west as a distinctive element in architectural design and decoration.

Akbar's buildings at Agra occupied the southern angle of the fort and were lined along the parapet of the eastern wall overlooking the river. This favourable situation was possibly responsible for most of these structures being swept away, their demolition being apparently necessitated in order to make room for the grand marble edifices erected by his grandson, Shahjahan. Among those that have escaped destruction reference may be made to two palace buildings, known respectively as the Akbari Mahal and the Jahangiri Mahal. The first, no doubt owed its construction to Akbar (probably completed in 1571), while the second, from its character and design, appears to be a later creation, also during this emperor's long regime, for the resi-

dence of the heir apparent, the future emperor Jahangir. Each of these palaces was designed on the usual scheme of a range of double-storeyed chambers surrounding a central courtyard. The Akbari Mahal is now mostly in ruins. From the vestiges that remain its treatment appears to have been a little coarser, though bolder, when compared to the finer and more ornate workmanship in the Jahangiri Mahal. A part of the Akbari Mahal was demolished later in order to accommodate the Jahangiri Mahal which represents a more complicated structure. This latter palace is approximately 261 feet by 288 feet externally and is provided with substantial bastions crowned by domed cupolas at the corners. It is entered by a gateway leading by a vestibule to an entrance hall whence galleries with sumptuous colonnades run round the courtyard. The view of this interior courtyard with its surrounding colonnades richly ornamented is one of impressive grandeur. The lay-out and distribution of the rooms, however, are not always regular, possibly indicating a certain amount of hesitancy on the part of the builders. The fabric is almost entirely of red sandstone inlaid with white marble. The system of construction is trabeate, the pillar, the beam and the bracket and the flat ceiling forming the principal features of construction. On the upper storey of the facades on each side of the court there is an arcade, but the arches have no structural purpose and are merely employed in an ornamental capacity. These arcades supply an appearance of lightness to the upper storey in contrast to the solid effect of the lower with its heavy columns and massive brackets and corbels. There is a profusion of exquisite carving all over the building, the plastic quality recalling the indigenous stone-carver's art. The quaint shape and design of the brackets, the inclined struts supporting the beams of the roof, the pillars with their expanding bases and capitals are more appropriate in wooden architecture from which certainly they have been derived. Again, "in the general character of the fort at Agra there is a resemblance to the fortress at Gwalior, with its palaces built early in the century which cannot be accidental. The elephant gateway, the cupolas of Amar Singh's gateway, the palaces rising out of the fort walls, the planning of these palaces, and also some of the carved details, all indicate that the Rajput citadel, which had moved Babur to admiration some forty years before, was used freely as a model by his more fortunately placed grandson". (*Cambridge History of India*, Vol. IV, pp. 537-38).

The forts that Akbar began to construct at Lahore almost at the same time, and at Allahabad some twenty years later, appear to have been carried out on the same grand scale. Though the former was considerably smaller, the plan is more regular and the buildings more symmetrically distributed. In spite of subsequent alterations, what is left of the buildings of Akbar resemble those at Agra and agree with them in general style and character. There is, however, a greater picturesque effect added to the Lahore palaces, perhaps due to the aesthetic predilections of his son, Jahangir, who usually loved to reside in the Lahore fort. The Allahabad fort has been shorn much of its architectural interest. Akbar's buildings at this place apparently conformed to those at Agra, Lahore and other places. But all, except one, are gone. This surviving monument represents a pretty structure and indicate a fashion for peristylar arrangement, the grouping of pillars in pairs and in fours forming again a novel and effective scheme.

But the most ambitious and magnificent of the emperor's architectural undertakings is the new capital city that he built on the ridge at Sikri, 26 miles to the west of Agra. This city was later on named Fathpur (the city of victory) after Akbar's conquest of Gujarat in 1572. The conception of this new imperial headquarters, it is recorded, is connected with the circumstances

that attended the birth of prince Salim, the future emperor Jahangir. Several of his children having died in infancy Akbar had been frequenting the saints with the object of having an heir to the throne through their blessings. At Sikri lived a saint, Shaikh Salim Chisti, who foretold the birth of a son who would survive the emperor. One of the queens having become enciente soon after, Akbar took her to Sikri and built for her a magnificent palace, now known as the Rang Mahal, near the residence of the saint. There, in 1569, she gave birth to a son, who was named Salim in reverent gratitude to the holy saint. The place was thought to be auspicious and the emperor conceived the idea of building an entirely new capital city at this place on a rocky eminence of land by the side of an extensive artificial lake. The scheme matured into the greatest of all his building projects, and this splendid city, with its grand mosque, its delightful palaces and pavilions, its spacious official buildings and other edifices, bears witness to Akbar's magnificent achievements as a patron of the building arts. Here we have one of the finest groups of Mughal buildings, the majority of them still intact, and they illustrate in a singularly forceful manner the emperor's artistic ideals and his genius in this respect. Conceived and built as a single unit, the work was pushed on with such phenomenal speed that as if by magic palaces, public buildings, mosques and tombs, gardens and baths, pavilions and water-courses, were called into being beneath the barren sandstone ridge of Sikri. In his autobiography Jahangir writes that "in the course of fourteen or fifteen years that hill full of wild beasts became a city containing all kinds of gardens and buildings, and lofty edifices and pleasant places attractive to the heart". (*Tuzuk-i-Jahangiri,* English translation, Vol. I, p. 2). The splendour and prosperity of this capital city also evoked comments from Europeans like Father Monserrate and Ralph Fitch, the latter describing it as greater than London, with a teeming population and full of merchandise from many countries.

Among the Mughal miniatures we have more than one painting representing the building of Fathpur Sikri. It is a scene of bustling activity, directed by the emperor himself whom we find in one of the pictures questioning a mason and urging him on, in another taking a hand in the work himself, and so on. It is the personal supervision of the emperor, possessed of an imperious and untiring energy, that was responsible for the lightning rapidity with which work was pushed on, and it is his own artistic taste and ideals that endowed the city with so much charm and magnificence. Even before the city was completed it became a busy and brilliant centre where poets and musicians, historians and theologians, artists and craftsmen, all flocked together under the benevolent patronage and inspiring leadership of the emperor. Unfortunately, the city was completed only to be abandoned for no apparent reason that we can guess. Many scholars ascribe the creation and desertion of the city to the passing whims of a despotic ruler. But a mere passing whim rarely calls into being such an architectural magnificence, and though the court was shifted, possibly for reasons of state policy, the city was not really abandoned. Akbar, and later on his son Jahangir, used to visit it on occasion. Akbar had a reverent love for the place and it was here that as late as 1601 he thought of erecting the triumphal archway, the Buland Darwaza, to commemorate his conquests in the Deccan.

The city at Fathpur Sikri occupies a rectangular area, running roughly north-east to south-west according to the configuration of the ridge on which it is situated. It is enclosed by bastioned walls round its three sides, the fourth being protected by the lake. The walls, not very

substantialy built, were of little military value and stand in definite contrast to the sturdy and solid appearance of the walls of either the Agra or the Lahore Fort. Nine gateways pierced the fortress walls, and of these, the Agra gate formed the principal entrance to the city. From this gate a road led straight to the Diwani Am (the Hall of Public Audience) and further on to the great congregational mosque that stands apart from the official and residential buildings situated on the flattened crest of the ridge. The other buildings of more or less utilitarian character, such as caravanserais, gardens, etc., are ranged around and principally down the slope of the ridge to the north. Apart from such a rough grouping of the buildings according to their purposes and uses, there is little indication of any regular system of town-planning having been followed, in the lay-out and composition of the city. The main buildings, again, are aligned diagonally to the city walls, an arrangement that was apparently necessitated to ensure regularity and conformity with the fixed orientation of the grand mosque, which, with its massive and lofty Buland Darwaza, supplies the most impressive landmark in the city.

The monuments of Fathpur Sikri may be divided into two classes, one religious and the other secular. The secular monuments, such as, palaces, residences, office buildings, *sarais*, pavilions, etc., are by far the most numerous, and they exemplify various designs and shapes. It is from these buildings of the secular order that one can form an idea of the general style of architecture that was developed during this august emperor's reign. The religious buildings, because of the needs of ritualistic conventions, were differently treated and conform to the general shape and design of the monuments of this order.

Undoubtedly, the most impressive creation of the new capital city is the grand Jami Masjid which has been aptly described by Fergusson as the " glory " of Fathpur Sikri and as having been " hardly surpassed by any in India ". Being the first of those great congregational mosques, which are usually associated with the chief cities of the Mughals, it is at the same time a magnificent monument and a superb model for the others that followed. Though consisting of a group of monumental buildings, of no mean artistic merit by themselves, the mosque was originally conceived as a single and symmetrical unit of the typical design, but on a rather vast and impressive scale. It covers a quadrangular area, 542 feet east and west and 438 feet north and south, with a high wall surmounted by a battlemented parapet and surrounding an inner court of unusually large dimensions. Originally there were three gateways of uniform shape and design, one in the middle of each of the perimeter walls on the east, north and south; but only one of these, that facing the sanctuary and known as the Badshahi gate, can now be seen in its original form. The open inner court with its fine ranges of arcaded cloisters surmounted by single rows of small and light kiosks has a fine and dignified appearance.

The sanctuary on the western side of the court measures approximately 288 feet by 66 feet and is, by itself, a spacious and self-contained unit. The facade is divided into three parts consisting of a large arched alcove within a rectangular fronton, flanked by arcaded wings on either side. In conformity with the design of the facade the sanctuary is crowned by three domes of the flat Lodi type, but considerably tilted at their bases with a view to increase their height. The central dome, with a diameter of 41 feet, covers the prayer hall corresponding to the nave, while the two side ones, each with a diameter of 25 feet, are placed over the two wings. The remaining portion of the roof is flat and supported on pillars and brackets of indigenous shape and

design. Each dome has a finial at the top which, again, is of the indigenous pattern. The curved ribs on the inside of each dome recall also the construction of the central dome of the Jami mosque at Champanir in Gujarat, a province which was noted for the traditional skill and dexterity of the indigenous craftsmen. As over the cloisters on the three sides, light and beautiful kiosks line the entire length of the roof of the sanctuary, thus effectively breaking the skyline. The facade is relieved by an elegant use of white marble inlay emphasising each architectural feature.

The interior arrangements of the sanctuary are characterised by the same simplicity and spaciousness of conception which distinguish the exterior. The three main divisions of the facade are maintained in the interior which consists of the central hall or nave behind the large alcoved entrance, and two pillared aisles on either side corresponding to the two arcaded wings of the facade. The nave is entered by three archways in the alcoved fronton and is roofed by the large central dome. It communicates with the pillared aisles by arches through the solid walls at the sides. The smaller domes over the wings mark the position of the chapels within the pillared aisles. The interior of the sanctuary, with its judicious sense of space, its long receding views along the well-grouped pillared aisles, its admirable matching of the two contrasting procedures, the trabeate and the arcuate, and its rich mural decorations distributed over most of the surfaces, especially over the *mihrab* wall, in an almost infinite variety of patterns, presents a fine and superb effect.

The grand mosque at Fathpur Sikri had been conceived as a balanced and harmonious composition and had been executed in a masterly manner so that each part was carefully adjusted to the other and to the noble magnitude of the structure as a whole. The symmetry of the composition was, however, disturbed subsequently by the erection of other structures within the courtyard and by the rebuilding of the southern entrance to the mosque enclosure as a massive and noble composition by itself. After his successful campaign in the Deccan the emperor was resolved to commemorate his victory by the erection of a triumphal archway. The southern entrance to the Jami Masjid at Fathpur Sikri was considered to be a suitable position, and the original entrance was replaced by the construction of a massive portal. This was known as the Buland Darwaza, or the lofty gateway, which, with its immense bulk towering above the buildings of the city, represents one of the most striking compositions ever known. It is a complete structure by itself, raised over a lofty stepped terrace, 42 feet in height, and consists of a large hall and a number of smaller apartments through which access is obtained to the inner quadrangle of the mosque. From the terraced platform to the finial it is 134 feet in height, the total height including that of the supporting terrace, being 176 feet. The width of the front is 130 feet, while from front to back it measures 123 feet.

Like most other buildings at Fathpur Sikri the fabric of this impressive gateway is of red sandstone, relieved by carving and discreet inlaying of white marble, that gives emphasis to the bold lineaments of the composition. The front is built in the shape of a semi-octagon, projecting 33 feet beyond the encircling walls on its flanks. Apart from its chaste ornamentation, the facade is remarkable for the treatment of the entrance to the mosque enclosure. Massiveness and dignity are pre-requisites of good architecture. An entrance portal requires massive dimensions for such effect of strength and vigour, and to give a large building a door at all in proportion to its dimen-



DELHI: DIWAN-I-KHAS: IN THE FORT: Details of Painted Ceiling.

sions is one of the most difficult problems in the science and art of building. The problem is to fit in a doorway in an immense structure, proportionate to its dimensions, and at the same time not too large to look out of its required purpose. The problem has been exercising the ingenuity of the architects in all ages, and different countries have been trying to solve the problem in different ways. It was in Islamic architecture that a satisfactory solution of this difficult problem was achieved whereby the dignity indispensable for the situation was attained without unnecessarily increasing the size of the entrance. The principle was to gradually diminish the monumental scale of the gateway building, part by part, till it is reduced to the size of a doorway of the normal form. It requires a long experience in working along the correct principle to arrive at a satisfactory solution of such a difficult problem, and the method adopted by the Islamic builders proved to be efficient, as well as highly artistic. In the Buland Darwaza we have a masterly conception in which the principle may be found to have been applied in its most effective and magnificent form. In this monumental portal the huge rectangular fronton consists of an immense archway accommodating in its rear a semi-domed bay or alcove in five planes in the shape of a half-decagon and in three vertical stages. This alcove or semi-dome represents the modulus of the design with its scale that of the monument itself, irrespective of the size of the openings at the back. The lowest, i.e., the entrance stage of the alcove, consists of three ordinary-sized archways for access to the interior, and is separated by a row of arcades from the upper which consists of bold arches surmounted by a series of cross-ribs supporting the half-dome of the bay. The chamfered sides are also almost similarly treated with the only difference that each facade is divided into two smaller alcoves with a row of arches intervening. The rectangular frame on each face is flanked by richly decorated slender quoins projecting beyond the height of the structure. The top is surmounted by battlements behind which small light kiosks raise up their domed cupolas thus lending a variety to the skyline. The back of the gateway with its three arches, battlements and kiosks is more simple in arrangement and is of much smaller height.

With its immense bulk and towering height the Buland Darwaza presents an imposing appearance from whatever angle it is viewed. It has space and scale, mass and proportion, and is full of decorative elegance which, by emphasising the noble lineaments of the structure, serves its purpose most effectively. We have here a perfect co-ordination between the structure and its ornament, so indispensable in the best forms of architecture. Standing out in male fashion against the barren rocks of the Sikri ridge, this gateway has almost an aggressive strength, more befitting in a citadel than in a place of worship. We have to remember, however, that it was an afterthought in the mosque design, the intention being to raise up a triumphal archway to proclaim the might of the empire after a successful military campaign. This the noble gateway fulfils most effectively, and, as a whole, it is an admirable reflex of the mind of the emperor who called it into being. One may find some incongruity in the structure in relation to the mosque which is thrown out of balance by this immense pile of portal. But, as already observed, this enormous gateway was no original part of the mosque design. Being an afterthought and conceived for a distinct purpose, it has to be judged as a self-contained and individual unit, and as such it has hardly any parallel in any other country. "The Buland Darwaza", to quote Percy Brown, "is a work of great force, especially when viewed from the ground below, as then it presents an appearance of aspiring and overwhelming

strength without being weighty or pretentious". (*Indian architecture: Islamic period*, p. 101).

Two other later additions were made within the mosque enclosure, and although they have increased its interest as well as its sanctity, they disturb the symmetrical composition of the mosque as a whole as obstructing the fine spatial effect of the interior court. One of these is the tomb of Shaikh Salim Chisti, the patron of Fathpur Sikri, placed on the north side of the quadrangle. It is a small and attractive building in marble, square in plan, and stands on an inlaid marble platform with a projecting portico on the south. The cenotaph chamber, a square of 16 feet side, is roofed over by a single dome and is surrounded by a corridor running all around and enclosed by elegant marble screens, rich and varied in design and so delicate in execution as to look almost like lace-work. The building was erected in 1571 by Nawab Qutbuddin Khan, and with its marble fabric and wealth of fanciful ornament it has a soft and effeminate grace that stands in definite contrast to the robust style of Akbari architecture. The marble work, however, appears to be an architectural palimpset, undertaken either during the reign of Jahangir, or about the beginning of that of Shahjahan. The original fabric was, most probably, of red sandstone, as was characteristic of all the buildings of the time. Marble as the main building material came into fashion during the later part of the reign of Jahangir, and became the prevailing mode in the time of Shahjahan. Due to this later development the followers of the holy saint were perhaps inspired with the idea of clothing his mausoleum by more refined and costly marble, and though certain details, such as the fanciful shape of the struts, the rich traceried ornamentations, etc., were elaborations during this later transformation, the original design of the building appears to have been little affected. The pillars supporting the portico are richly carved, and particularly interesting are the convoluted struts with perforated ornament between the curves, springing from the shafts and supporting the brackets under the eaves. Such struts might have been derived from similar struts in the temples of Gujarat, but elaborated to such an extent as to look quite fanciful. The pierced screens of the corridor are also very finely worked, the lightness of their execution being perhaps responsible for the tomb being described as "a gem of craftsmanship". In its present appearance, however, the the tomb lacks the simplicity and robustness of Akbari style and is entirely out of keeping with the emperor's ideals of building art.

The interior of the tomb is also as elaborate as the exterior. The walls are variegated by rich painted patterns; the floor is inlaid in coloured marbles; and the wooden canopy over the cenotaph, consisting of four pillars supporting a handsome dome, is inlaid with ebony and mother of pearl.

Close by and on the east stands the mausoleum of Islam Khan, a grandson of Shaikh Salim Chisti, built of red sandstone in 1612 A.D. This encroachment led to the dismantling and closing of the entrance gateway on the north side of the mosque enclosure. Though built during the reign of Jahangir, its red sandstone fabric retains much of the quality of Akbari style. It consists of a large domed chamber, square on the outside and octagonal inside, and is surrounded by a corridor all around enclosed by perforated screens. Later on several burial chambers had been made on the western side by placing lateral screens across. The kiosks on roof, apart from breaking the skyline, impart a picturesqueness to the building, which in its fabric as well as in its design is nearer to the buildings of Akbar than to those of Jahangir.

At Fathpur Sikri the civil and residential structures are, by far, the more numerous. Though not generally imposing in size, they are singularly interesting as elegant types of office and domestic buildings of the period. In the former class mention should be made of two fine structures, one known as the Daftar Khana or the Office, and the other, the Diwani Khas, *i.e.*, the Hall of Public Audience. The former consists of a rectangular hall, measuring approximately 36 feet by 19 feet on the inside, surrounded by a wide columned verandah, roughly 18 feet in depth. The roof is flat and the entire construction is of the indigenous trabeate order. The peristylar arrangement on each facade, with the pillars arranged in pairs and quartettes, has a fine view of almost classic elegance.

The Diwani Khas or the Hall of Public Audience, though not a large structure, was a highly distinctive production because of the unique manner in which its interior has been designed and treated. It is a square building, about 43 feet each way on the outside, the facades being divided into two stages by wide cornices supported on heavy brackets running on all sides. The interior consists of a single vaulted chamber, nearly 28 feet square, and the unusual manner of the treatment of this hall is paralleled by no other building in any part of the world. A continuous hanging gallery runs around the four sides, from the corners of which narrow galleries are thrown diagonally to converge in the centre. Here the diagonal passages meet a circular platform supported on a substantial and exquisitely patterned column, rising from the centre of the floor and with a massive expanding capital composed of a cluster of closely set pendulous brackets. It has been suggested that this complicated contrivance of the circular platform was intended for the royal throne, the whole arrangement symbolising the emperor's dominion over the four quarters. The design of the brackets and of the galleries suggests wooden prototypes and reflects essentially the indigenous methods and systems. The arrangement of a hanging throne platform connected with the hanging galleries by radiating passages represents a novel and original conception, and none but the versatile emperor could have devised it. In spite of top-heavy appearance of the expanding brackets, the entire arrangement has a certain dignity of effect and not a little artistic significance. The roof of the building is flat and is provided with a kiosk with a domed cupola at each corner.

The palaces and other residential buildings in the city of Fathpur Sikri represent elegant structures, in spite of their small scale. They show, more or less, the same general style, the difference being noted in their planning and decorative detail. Of these, the most important conception seems to have been the one known as Jodha Bai's Palace. It is a stately building of large size and is designed in the usual scheme of a suite of rooms around a central court. Here we have a one-storeyed corridor running round a paved courtyard with a substantial double-storeyed block imposed on the middle of each side and at each corner. The two-storeyed blocks in the centre consist, more or less, of self-contained suites of apartments in the rear preceded by porticos in front overlooking the paved inner court. Many of these chambers are covered by waggon-vaulted roofs of stone. They are connected with the corner blocks by continuous galleries below, each of the corner blocks being covered by a low-pitched dome. The view of the interior quadrangle, with its continuous corridor, double-storeyed blocks with variously designed roofs, and wide eaves casting deep shadows over every facade, is remarkably impressive and provides a definite contrast to the forbiddingly plain exterior which, with continuous walls, serves as a high screen round the palace, no doubt intended for ensuring privacy and seclusion. Relief

is obtained by the projection of annexes—a front court preceding the entrance, and a service block and an airy pavilion (Hawa Khana) on the south and north respectively—and further by balcony windows projecting from the sides of the entrance and from near the angles.

The decorative features of the palace are in extremely good taste and indicate a preference for the indigenous motifs. The construction, likewise, is predominantly trabeate. The roofs and the parapets still retain traces of glazed tile decorations, but the attractive colour scheme was intended more for emphasis and relief, rather than for any brilliant flashing effect. The carved decorations on pillars, balconies, perforated grilles, ornamental niches, etc., recall indigenous patterns, and these, together with the volutes, brackets, etc., appear to have been derived from similar features in the temples of Western India, particularly Gujarat. The use of brackets and lintels in the entrance archway also point to a strong indigenous influence in methods as well as in decorative designs and their executions. It is apparent that persons traditionally familiar with the indigenous architectural practices were responsible for the conception and construction of this beautiful palace.

The House connected with the name of Raja Birbal represents a two-storeyed structure raised on a plinth, with entrance porches on the north as well as on the south. The ground floor has a suite of four rooms, each with a flat ceiling composed of long slabs of stone extending from wall to wall and laid on a curved cornice supported on brackets. The first floor is reached by two staircases in the thickness of the walls, one in the south-west corner and the other in the north-east. It has only two rooms, placed cornerwise, which open on to the two terraces once enclosed by stone screens. Each room is covered by a dome, raised on an octagonal drum, which, though of low-pitched form, has been built on the principle of a double dome. The entrance porches on the ground floor have angular roofs, thus lending a pleasing variety to the elevational aspect of the building. The interior as well as the exterior of the building are covered with exuberant, but forceful, carvings. The architectural treatment of the exterior is immensely diversified with pilasters, dados, arched niches, and amazingly ornate brackets supporting the wide eaves. The crest pattern on the parapet of each storey is also in refined taste. Birbal's House at Fathpur Sikri represents a superb example of residential building, remarkable for its balance and harmony of design and for the distinctive way in which the structural and the decorative elements have been employed, one in beautiful conformity with the other.

Two other buildings of this class, though simple and unpretentious, are also notable productions because of their delightful elegance in setting as well as in workmanship. One of them, known as the Turkish Sultana's House, is a modest composition of little structural value. It consists of a single one-storeyed apartment contained within a pillared gallery and situated amidst a picturesque setting of paved courts and water courses. Apart from its beautiful situation, much of the elegance and individuality of the building rests on the rich variety and quality of its carved decorations covering every inch of its surface, both inside and out. Executed in a delicate method of low relief, the carvings include, besides motifs of the more conventional order, a remarkable series of naturalistic panels, so refined in treatment as to avoid any feeling of prettiness or vulgarity. "It is", says Fergusson, "one of the richest, the most beautiful and the most characteristic of all Akbar's buildings. . . . . It is impossible to conceive anything so picturesque in outline or any buildings carved and ornamented to such an extent without the

smallest approach to being overdone or in bad taste". At one time this building appears to have been covered with elaborate paintings, significant fragments of which still remain. Scholars may try to recognise the hand of Persian artists in the conception and decoration of this fine building. But the methods of construction are purely indigenous and the character and technique of plastic embellishments suggest wooden derivations, betraying the hand of Indian workmen familiar with that tradition.

The House of Miriam represents also a small, but perfect, residential building characterised by a chaste simplicity of design. It is situated on a low terraced platform and consists merely of suite of rooms with a pillared corridor along its three sides and with an open rectangular kiosk, crowned by an angular canopy, on its flat roof. The simple design of the pillars and brackets lend an appearance of almost classic dignity to the exterior, but the interior was originally embellished with large mural paintings drawn with great vigour. Traces of these paintings still remain and they supply interesting specimens of the early and formative stage in the evolution of the celebrated Mughal school of painting. It is said that the building was once profusely gilded for which it was known as Sunhara Makan or the Golden House.

The Panch Mahal at Fathpur Sikri, described by some scholars as a rather "fantastic creation", represents an unusual structure which displays, in a singularly interesting manner, the emperor's architectural preferences and ideals. It consists of a tall pyramidal structure of five storeys, each storey designed as an open pavilion supported on clusters of pillars of graceful designs. The main element of the composition is the hypostylar arrangement of each storey, the ground floor consisting of eighty-four pillars, the number diminishing gradually in each upper storey up to the top which is crowned by a domed canopy supported on four pillars. In spite of the arrangement being so simple, the entire structure is of a noble and dignified design. "The pillars in each storey conform to a general scheme, but . . . . . everyone is varied in the treatment of its cap and base, as well as in its mouldings or other enrichments, so that the eye finds infinite variety of interest in observing the details without any disturbance of the general effect of classic dignity and repose". (Havell, *Indian Architecture,* pp. 173-74). The entire conception of the pavilion, including the design, the structural procedure, and the shape and pattern of the pillars and the brackets, breathes the spirit of indigenous architectural practices and it has been rightly suggested that it is derived from the old Assembly halls of India.

There are also other structures of no little artistic merit in the deserted city of Fathpur Sikri. The above, being the most notable, illustrate, in an effective manner, the general style of Akbari architecture. These other buildings, each designed for its special purpose, have much the same architectural character that we have already noticed in the monuments described above. One other important architectural conception was planned and initiated by this great emperor, and this was his own mausoleum building at Sikandra in the vicinity of Agra. But he did not live to complete it, a task that devolved on his son and successor, Jahangir. There are reasons to believe, as we shall see later on, that Akbar's original conception was, to a certain extent, modified by Jahangir; and it is to these subsequent modifications that the present architectural appearance of the building is attributed. It now stands apart from Akbar's own buildings and a discussion of the monument should, hence, be properly reserved for the next chapter.

The buildings erected by Akbar at Agra, Lahore and Allahabad have been swept away or much disfigured during the subsequent operations. The noble and graceful edifices of the capital city of Fathpur Sikri, however, remain practically unaltered and in much of their pristine form. They supply, hence, a wonderful reflex of the emperor's versatile personality and of his liberal and catholic views. Built as a single and comprehensive unit, Fathpur Sikri reflects the mind of the emperor inspired with the vision of a united India—a vision that is clearly evident in its various magnificent buildings. His sympathies with Indian culture led him to draw gifted artists and artisans from all parts of India. Coupled with their contributions, there were the elements of the Islamic architectural tradition as developed in India during the earlier phases of the Islamic rule. As a patron of the building arts Akbar stands unique in the history of Indian architecture. He has shown a marvellous aptitude and adaptability and himself guided the work of the builders and artists, each working according to his own tradition and capability. The emperor's liberal and catholic views and his highly sensitive artistic mind directed the movement in such a way as to blend and harmonise the best in every tradition into a unified and distinctive style. With its roots on the soil of the country, this style may be called truly national.

The buildings of Akbar are mainly trabeated in their construction. There is also a predominance of indigenous motifs and practices. The genius of the emperor as a patron of the building arts lies in the fact that he found immense possibilities in the traditional skill and experience of the indigenous builders and he utilised them in full in his own architectural projects. Under his inspiring leadership the different traditions commingled in such an effective and fruitful manner as to build up a forceful architectural style in which the structure with its noble lineaments are found to be in perfect unison with its elegant decorative scheme. We have in Akbar's buildings rich and variegated ornaments, no doubt, but the value of the structure was never missed. The ornaments, however exuberant, always wait on the structure and are subservient and complimentary to it as emphasising, and giving relief to, its bold lineaments. The emphasis on the horizontal, clearly evidenced in the wide projecting eaves throwing deep shadows across the elevation of the building and the lines of parapets and string-courses, are finely counterbalanced by the equally strong vertical passages of light and shade produced by the pillars and the brackets. The solid and massive aspect of the buildings is balanced by the soaring effect of lightness imparted by the graceful kiosks over the roofs. It is on this impressive balance between the horizontal and the vertical, between solids and voids, between massive heaviness and airy lightness, that the beauty of the structure mainly depends, the elegant and refined ornamental scheme adding to its magnificence in no mean degree. In Akbar's buildings we have a noble and forceful architectural style, built up on the traditions of the soil, a truly national art movement with immense potentiality under able and intelligent patronage.

DEVELOPMENT AND CULMINATION

Jahangir's contributions to building art appear to have been rather insignificant when compared to the vast and ambitious architectural projects of his father on the one hand and those of his son on the other. Like his great grandfather, Babur, he was a keen lover of the beauties of nature and art, and was endowed with an aesthetic sensibility much greater than that of his father. But Jahangir's tastes and predilections lay in other directions. His inclination was more towards the art of painting than towards the art of building. The Mughal school of painting had its foundation in the days of Akbar and it was Jahangir's keen aesthetic sense and critical power of judgment and appreciation that raised the school to the highest peak of its achievement. In *Tuzuk-i-Jahangiri, i.e.* the auto-biography that Jahangir wrote, we have frequent instances of his reactions to the art of painting; and in these we have a frank picture of the aesthetic mind of the emperor and of his keen susceptibilities. Significantly enough, his reaction to a good building has seldom been recorded, and even when recorded, it is of a general and superficial nature which indicates that his own appreciation of the building art was not above the level of that of an ordinary spectator.

The brilliant and ceaseless architectural activity initiated by Akbar was followed hence by a comparatively uneventful period. Nevertheless, in the history of Mughal architecture the period of Jahangir was not without a certain importance, supplying as it does, a significant link between its two grand phases—the initial phase of splendid and purposeful buildings of the time of Akbar and the culminating phase of luxuriance and exuberance in the days of Shahjahan.

During the early years of his reign Jahangir had to take a certain personal interest in the production and completion of the mausoleum building which his father had planned as his last resting place. His interest and patronage, as manifested here, were not such as to hope for a continuation and development of the direction which Akbar gave to the art of building. Akbar's mausoleum stands at Sikandra, five miles west of Agra, and consists of a singular design and composition not paralleled in any other monument of the funerary order. It represents a unique creation; and it is apparent that it owed its conception to the versatile ideas of Akbar, who wanted to endow it with a novel and original character, quite different from the conventional type of tombs with which we are usually familiar. The emperor, however, did not live long to carry his remarkable project to completion, a task that devolved on his son and successor, Jahangir. The building was completed in 1613 A.D., eight years after the death of Akbar. As it now stands, the mausoleum lacks the homogeneity and balance which constitute the essential keynotes of Akbar's buildings. It has to be noted that the major part of the building was put up at a time when the guiding mind of a genius like Akbar was no longer there to supervise the construction of this vast structure through all its different stages. It is possible, therefore, that some kind of alteration and modification of the original design took place, either unconsciously on the part of the builders, or due to the undue intervention of Jahangir, of which we have several instances recorded in his autobiography. This probably explains the fact that Akbar's mausoleum at Sikandra, in spite of its unique character, fails as a unified composi-

tion and represents the least successful monument associated with the name of that great emperor.

The mausoleum building is situated within an extensive garden approached by an imposing gateway in the middle of the southern perimeter wall and with three other false doorways, one in the middle of each of the other three walls, provided no doubt, for the sake of symmetry. The principal entrance on the south is a noble monument in itself because of its pleasing proportions, the variety of its carved and inlaid ornamentation, and lastly the elegant white marble *minarets,* one at each corner of the building. The *minarets* represent noteworthy introductions adding to the beauty of the design, and the type, though new in appearance, is found here in a fully crystallised form, in no way inferior to the soaring *minarets* at each corner of the terraced platform of the celebrated Taj Mahal.

The garden, as is usual, is laid out into a number of squares by broad paved walks widening out at intervals into terraces with ornamental fountains. In the centre of this garden stands the curious tomb building of a stepped pyramidal form truncated at the top. The building rises in several storeys gradually diminishing in scale as they go up. The design is, no doubt, unusual for a funerary monument and must have owed its conception to the original ideas of emperor Akbar. The ground storey is conceived on a superb scale and measures more than 300 feet each way and a little over 30 feet in height. Each side is pierced by a series of elegant arches with a larger arched alcove accommodated within a tall rectangular frame interposed in the middle. These arcades enclose a domed mortuary chamber, and such a conception of the mortuary chamber, in place of the usual underground crypt, represents an unusual and unorthodox arrangement which might have been due to the liberal and unconventional views of Akbar. Above this lowest stage rise the other storeys, each receding in scale than the one below. Three of these storeys, built of red sandstone like the lowest, show an arrangement of superposed tiers of pillared arcades and kiosks, while the topmost, built entirely of chaste white marble, consists of an open court accommodating in the centre a cenotaph on a raised platform and enclosed by a beautiful colonnade on the inside and on the outside by trellis-work of the most exquisite patterns. At each corner rises a slender marble kiosk adding to the variety of the skyline.

In spite of its unusual design and a certain lack of harmony among the different sections of the elevation, there are not a few elements in this structure which are pleasing by themselves when judged separately and independently. The ground storey is in itself a noble conception, a powerful structure but not too heavy, which with the pleasing scale of its different parts represents a suitable substratum for the support of an impressive superstructure. But the upper storeys, though satisfying in themselves, are too light and out of place in the substantial composition of the lowest stage. In elevation also these upper storeys lack balance and co-ordination in relation to the substructure, and the monument as a whole fails as a unified and harmonious composition. One may recognise the vigorous and versatile personality of Akbar in the original conception of the monument, and it is possible that the lowest storey was completed by him before his death. In the composition of the upper storeys we fail to notice the breadth of vision and sense of harmony that characterised Akbar's buildings, and it was here that Jahangir might have possibly intervened. Each of these upper storeys, particularly the topmost one with

PLATE—VIII.



DELHI : DIWAN-I-AM : IN THE FORT : Mosaic Work at the Back of the Marble Throne.

all its delicacy and perfect finish, might be considered as an elegant monument if it had stood apart and isolated. But they fail to harmonise with the noble conception of the ground storey, and herein lies the defeciency of the monument as a whole. In spite of all his aesthetic tastes Jahangir had not the vision and imagination of Akbar and lacked the latter's guiding genius so as to correlate the different sections of the elevation into a pleasing and harmonious composition.

Something should also be said regarding the unusual plan and elevation of this mausoleum building. It has been suggested that this novel design was derived and imitated from the old storeyed *viharas,* and so far as the fundamentals of the composition are concerned, apart from the minor architectural details, this suggestion appears to be reasonable. We have already noted Akbar's preference for indigenous artists and their traditions, and this preference is clear and evident in his buildings at Agra, Lahore, Fathpur Sikri and Allahabad. It might be that Akbar wanted his mausoleum to have an independent and original character, and for this he derived his inspiration from the old storeyed *viharas* that had been characteristic of India in the ancient days.

In the history of Mughal architecture Jahangir's reign marks the transition between its two grand phases, namely the phase of Akbar and that of Shahjahan. Already in the tomb of Akbar we may recognise the approach of a new direction. The direction is towards an effect of lightness and consequent weakness in the structure and to an increased sense of ornamentation. The arabesques make their appearance for the first time among the inlaid decorations. This tendency towards a more ornamental effect becomes gradually emphasised, not unoften to the detriment of the structural value when the vision and imagination required to correlate the ornament to the structure fails. The general trend was towards a prettiness of the building, instead of towards a grandeur of its conception. And this trend, so opposed to Akbar's architectural ideals, becomes more and more manifest under the dilletante tastes of aesthete Jahangir and pleasure-loving Shahjahan. Mughal architecture was not destined to follow in the direction of forceful and purposeful buildings initiated by Akbar. Neither Jahangir nor Shahjahan possessed Akbar's genius for constructive ideas, and so far as their personal influence on the architecture of the time went they only helped to clothe in more costly materials the creative forms of the previous period and to cover them with a wealth of ornament. Both of them, particularly the latter, tried to create effect by sumptuous decoration and lavish use of costly materials, rather than by an intellectuality in structural design. The history of Mughal architecture during the period of Jahangir and Shahjahan is governed by this dominant idea and reaches a baroque phase of exuberance and over-refinement—a faithful picture of the changed outlook of the Mughal court after Akbar's strong personality had ceased to reign.

The most important feature of the period of transition is noticed in the substitution of red sandstone by white marble. Hitherto the main fabric of the building was composed of red sandstone with occasional insertions of white marble. This practice has been long-continued and may be traced from the time of Alauddin Khalji downwards. In Akbar's buildings this was also frequently resorted to to lend relief and colour to the facades of the monuments. This white marble inlaying has been gaining ground and its effect on the red texture of the sandstone fabric represents one of the most charming measures in the ornamentation of the surfaces of the monuments. Always accessory to the strong lineaments of the structure, such ornaments

wait on the monument without any detriment to its architectural design or dignity. But this sense of value for the structure and its design was undermined when buildings came to be composed of white marble. This happened towards the end of the reign of Jahangir. Marble has a certain effeminate quality. It has not that quality of solidity and strength imparted by red sandstone. The white marble takes a shining polish and is the best possible medium for fine tracery and arabesque works, for painting as well as gilding. It supplies a very convenient surface for costly *pietra dura*. By its very nature it invites decoration which has a tendency to get exuberant and sumptuous almost to the point of being overdone. The result is often restless. Miraculously beautiful in detail, a building in white marble tends to lack strength. Weakness is inherent in marble fabric.

Jahangir also loved colour and this was imparted to the buildings of his period by encaustic tiling, and the system of *pietra dura,* i.e. the inlaid mosaic work of hard and precious stones of various hues and colours, began towards the end of his reign. These, no doubt, lent to the buildings a colourfoul and picturesque effect; but such ornamentations cannot compensate for the effect of weakness and effeminacy inherent in white marble fabric. It is not surprising, therefore, that the buildings of the later part of Jahangir's reign and the pretty creations of Shahjahan usually lack those qualities of substance and solidity that characterised Akbar's buildings. There is an emphasis on colour, on sumptuous decoration, and on lavish display of costly materials, but they hardly make up for the loss of substance which constitutes the main element of a forceful architectural style.

The change of outlook in the art of building was noticed also in other directions. Akbar's preferences for indigenous ideals and traditions are well known and clearly manifested in his architectural undertakings. Not a little of the character of his buildings depends on the works of the indigenous artists and craftsmen gathered together from various directions. Akbar had the genius to co-ordinate and harmonise the different ideals and traditions and to guide his builders to create unified and forceful compositions out of the many, and often differing, elements. He initiated an era of fruitful collaboration among artists of different traditions, not excluding the foreign, and the different traditions adapted themselves to create an art movement that may be considered as a product of the soil itself. It is the personal interest and supervision of this enlightened emperor, actuated by an ideal of unity, that produced a truly creative atmosphere and the artists, under his helpful guidance, were inspired to work and produce their best. A distinctive style of architecture, characterised by a nobility of conception and forcefulness of execution, came into being. This style was founded on the traditions of the country and extra-Indian elements were adapted to suit the needs of this growing style that may be termed truly national. After Akbar, his enlightened direction was lacking and the style was diverted from its course. His successors had not his creative instinct and contributed very little in that sphere. What they did was merely to clothe his creative ideas in more costly materials and to cover them with a lavish display of ornament and colour. Thus overburdened, the style lost its life and spirit. In spite of pompous exuberance, very few noble and forceful buildings were created in the period of Jahangir and Shahjahan.

The Mughal court in the time of Jahangir and Shahjahan was composed mainly of a nobility of Persian extraction. The life in this court was also imbued with Persian ideas of luxury

and grace. This predilection for Persianism had also its reflection in the art and culture of the time. In architecture also there may be recognized a growing preference for Persian ideas and a gradual isolation from the indigenous ideals and traditions. Akbar's national style of architecture had its foundation chiefly on indigenous sources, and a gradual separation from the ideas and traditions of the soil and a greater dependence on foreign ideas diverted the course of the style from the path that Akbar had chosen for it. Lured by foreign ideas of pomp and grace the style was practically isolated from its source and the inevitable dessication was not long to follow. This is apparent in the poverty of design and structural value that characterises most of the monuments produced during this later phase of Mughal architecture.

The above brief discussion of the general trends and tendencies of this later phase of Mughal architecture is necessary for a proper understanding of those sumptuously pretty marble monuments that have often been extolled by scholars of dilettante tastes as representing the grand efflorescence of the Mughal architectural style. A correct historical perspective, however, would attribute to Akbar's buildings a far greater nobility, in conception as well as in design and execution, representing an architecture of immense potentiality and on a higher aesthetic plane. The monuments of the later phase represent merely a rich and baroque form of this architecture.

Jahangir, we have already observed, left no marked personal impress on the architecture of his time. Even his palace in the Lahore fort, where he loved to reside, has nothing distinctive about it. A keen lover of nature he delighted in pleasure gardens, and is known to have constructed several such pleasaunces. The Shalamar Bagh in Kashmir is one of the most charming of his undertakings in this direction. The plan is, more or less, formal and stereotyped—an arrangement of square terraces and picturesque flower beds, paved walks and avenues of trees, crystal water courses and splashing fountains, and airy pavilions, all laid out with the object of providing delight to the eyes and comfort and relaxation to the tired nerves. This type of ornamental pleasure gardens is inseparably linked up with the life of the Grand Mughals and the production of such pleasant and luxurious amenities suited Jahangir's tastes and temperament.

Jahangir's mausoleum that stands at Shahdara, near Lahore, cannot claim to have any great architectural distinction. Like his father's mausoleum at Sikandra, it is situated within an ornamental garden surrounded by a high brick wall with a gateway in the middle of each side. The garden occupies a square, over 1500 feet each side, the whole area being divided into sixteen smaller squares by means of paved walks with an ornamental fountain and a reservoir at each point of intersection. The squares were once filled up by flowered parterres, each of a different kind, so that the garden in its pristine form was, more or less, an orgy of colour. The mausoleum building is situated in the centre of this garden and is a square of 325 feet side. It stands on a low plinth and consists of one storey, 22 feet in height, with a handsome octagonal *minaret* of five storeys shooting up from each corner to a height of about 100 feet. Originally a marble pavilion occupied the centre of the terraced roof; but with its disappearance the building now lacks balance and symmetry of composition. The facade on each face consists of an arcade with a central arch accommodating the entrance doorway flanked by five others on either side. In the interior there are ranges of rooms on all the four sides enclosing the octagonal mortuary chamber with the marble cenotaph in the centre exquisitely embellished by inlaid patterns. But for the tall *minarets* the appearance of the whole building is unimpressive, the

low facade between the minarets being rather ineffective architecturally. The lavish colour, so freely imparted to its surface by inlaid marbles, glazed tiles and painting, can little improve the effect of the monument with such a strong structural deficiency.

Two other tombs, built towards the close of Jahangir's reign, represent more successful achievements in respect of design as well as in execution. Historically they are also interesting as foreshadowing the subsequent developments of the Mughal architectural style. One is the mausoleum of Itimaduddaula, father of Jahangir's remarkable empress, Nurjahan, who raised it up in 1626 A.D. in memory of her father. It is situated at Agra, on the left bank of the river Jumna, within a garden enclosed by a wall, measuring 540 feet each side and pierced by red sandstone gateways, one in the middle of each side. It stands on a raised terrace and consists of a square building, 69 feet on each side, with an octagonal turret in two stages, surmounted by a domed cupola, thrown out at each angle, and with a square pavilion, covered by an angular canopy, placed in the centre of the terraced roof. The interior consists of a simple arrangement of a central cenotaph chamber, enclosed by connected rooms corresponding to an inside gallery. An agreeable light is introduced into the interior, both in the lower and the upper storeys, by exceedingly delicate open lattice-work, aptly called a " gossamer of fretted grilles ". The building is composed entirely of white marble and covered throughout with a rich mosaic of *pietra dura,* the first, and certainly one of the most successful, application of this class of ornamentation in the Mughal monuments. In spite of dwarf heights of the corner turrets, there is an effect of balance and harmony in the design of the structure, the projecting cornices supported on brackets providing further a co-ordinated sense of relation between the horizontal and vertical aspects of the building. The ornaments are also in elegant taste being accessory to the structure and its various lineaments, and in spite of their rich character they have no overburdening appearance on the building.

The tomb of Itimaduddaula is of a significant interest in the history of Mughal architecture as it supplies a link between its two important phases, namely those of Akbar and of Shahjahan. It represents the transition from the red sandstone phase of Akbar's buildings with their direct simplicity and robustness of structural design to that of sumptuous marble with all the changes, as already described, inherent therein. Itimaduddaula's tomb, as the first notable building in white marble with its rich ornamentation in *pietra dura,* may be regarded as heralding the approach of this new movement which reached its culmination in the days of Shahjahan. In this tomb building one may still recognise the value of architectural design and the subordination of the rich ornamentation to the lineaments of the structure. But the white marble texture with its emphasis on colourful decoration already suggests a certain effeminacy and weakness, which some scholars describe as a reflection of the feminism of the empress who was responsible for its creation. This apart, a marble structure tends to fail in the qualities of substance and robustness which are the essential requisites of noble and forceful architecture, and weakness and effeminacy, coupled with a feminine love for display of pomp and ornament, follow as necessary corollaries. In spite of its structural qualities, the tomb of Itimaduddaula furnishes the impression of a miniature precious object magnified into a piece of architecture. And this impression becomes more manifest in the subsequent buildings in which, not unoften, the rich overlay of ornament is found to conceal the structure itself. Itimaduddaula's mausoleum, in spite of its many qualities, marks hence the epoch of a new direction which is a presage of

the decline, and represents a step towards that brilliant, but baroque, form of Mughal architecture in the days of Shahjahan.

Another tomb, that of Abdur Rahim Khan-i-Khanan at Delhi built towards the end of Jahangir's reign or shortly after, marks a significant link between the tomb of Humayun at Delhi and the celebrated Taj Mahal at Agra. Unfortunately, the building now is little more than a mere shell being stripped of its white marble facing in the latter part of the eighteenth century. It may be found to have been a copy of Humayun's tomb in many respects. Like the latter, it stands on a terraced basement with arched recesses on each side, and shows an almost similar arrangement in the divisions of its facades and of the roof. There is, however, a notable deviation in the angles not being chamfered, so that the building represents a plain square in place of the octagonal appearance of its prototype. Standing midway between the tomb of Humayun and the most brilliant culmination of that design i.e. The Taj Mahal, the tomb of Khan-i-Khanan marks effectively the transition from the earlier to the later phase of Mughal architecture.

Jahangir was followed by Shahjahan, one of the most splendour loving of the Mughal emperors. It was during his reign that the Mughal architectural style reaches its supreme brilliance. The character of this brilliance has already been indicated. Like his grandfather, Akbar, Shahjahan was a great patron of the building arts and beautified his capitals with splendid palaces and other monuments. But he had not the vision of Akbar, nor the latter's strength of character. This is clearly reflected, apart from other things, in the great contrast supplied by their respective buildings. The manly vigour, the direct simplicity and the exuberant originality of Akbar's buildings stand widely apart from the extreme and almost effeminate grace, the sumptuous appearance and the dearth of structural designs of the buildings of Shahjahan. The contrast is so striking that each group seems to represent a class by itself, though both were the products of the same dynasty of sovereigns, one being closely followed by the other. Only a change of outlook and temper can explain this sharp contrast.

Jahangir had no architectural pretensions and during his reign the Akbari style of architecture was already losing its simplicity and vigour. His court, particularly under the influence of his imperious consort, Nurjahan, patronised a culture, no doubt eclectic in character, in which the foreign, especially the Persian, elements predominated. In Shahjahan's court the Persian character was even more emphasised. The life in this court, composed mainly of a Persian aristocracy, was imbued with Persian ideas of grace and luxury carried almost to the point of over-refinement and exaggeration. Persianism became the fashion of the day, and it is from this time that Persian ideas prevailed in the art and culture of the Mughals. Persianism is a late feature in the history of Mughal architecture. It had very little part to play in its virile and creative phase of the earlier epoch. It makes its appearance and its influence felt when Mughal architecture had already entered its baroque phase. Instead of being associated with the formative phase of Mughal architecture, Persianism is linked up with its decline.

The substitution to costly marble was apparently inspired by the desire to impart to the buildings an exuberant appearance of prettiness and elegance corresponding to the luxurious atmosphere and temper of the later Mughal court. Shahjahan himself was imbued with the pre-

vailing ideas and his love for pomp and luxury and display of splendour is well known. It is not surprising that marble, with all its brilliant possibilities for reflecting the luxurious spirit of the court, was chosen by him as the chief medium in all his architectural projects. Along with possibilities marble has inherent weakness too that can only be arrested by intelligent and imaginative guidance. And this, in spite of all his architectural predilections, Shahjahan failed to supply. Shahjahan lacked the wide vision of his grandfather, nor did he possess the latter's liberal views and versatility. He could not rise above his environment and his mind worked in a groove, which was that of the court. Akbar, unlettered though, was one of the foremost intellectuals of his day; Shahjahan, in spite of being a man of letters, lacked his grandfather's intellectual calibre, and naturally the vision and imagination that come from such a quality. In spite of all the magnificence of his architectural undertakings, Shahjahan failed to contribute, hence, any creative design or form to the history of Mughal architecture. He imitated ideas and designs already known, but clothed them in costly marble and overlaid them with a lavish display of ornament.

The new direction and what it presages have already been outlined. Its symptoms will become apparent as one proceeds to survey the monuments of this phase. The predilection for marble is graphically illustrated by Shahjahan's replacements of the earlier sandstone productions of his predecessor, described as barbaric "abominations" by a court panegyrist, by marble palaces and pavilions, extolled as masterpieces of "this august reign when .... lovely things reached the zenith of perfection." It is unfortunate that views, similar to the above, are shared also by many scholars. It is only the lack of a correct historical and aesthetic perspective that can explain such misguided views. A comparative estimate of the Mughal architectural style in its two important phases of expression has already been indicated. The contrasts in appearance and effect will become manifest, and the relative merit of each clearly determined in the series of palaces in the Agra fort where the two groups of buildings are demarcated side by side. A keen observer cannot fail to perceive a nobility of conception and robustness of execution in the remains of Akbar's productions as opposed to pretty sensuousness imparted by Shahjahan's luxurious creations. One may excuse categorical statements as above from a court chronicler in praise of his master's achievements, not surely from a discerning historian and critic having a true perspective and a proper understanding of the essential principles of good architecture.

Marble of a pure white texture and delicate grain was procured from the quarries of Makrana in Jodhpur and formed the chief building material in the time of Shahjahan. When this was not made use of, stone fabrics were plastered with fine stucco, smoothed and polished to the whiteness of an egg-shell to keep harmony with the white marble fabric. The fine and delicate texture of the marble fabric required a new sensibility in the ornamental treatment of the surfaces. Relief decoration of an essentially plastic quality has naturally to be avoided as emphatic contours would ill-suit the chaste texture of the marble fabric with its own intrinsic beauty. Moulded outlines of ornamental panels, lending variety to the surfaces, are fine with their contours as little obtrusive as possible so as not to disturb the general effect. Surface ornaments tend to subtler forms with emphasis on colour. The costly fabric invites costly decoration and gilding and mosaic or precious stones, i.e., *pietra dura,* constitute the special features of ornamentation in the marble phase. A soft and effeminate quality is immanent in marble fabric, and ornamentation remains effective so long as it is kept restrained. But the tendency to lavish display

of pomp and ornamentation is inevitable when one remembers the atmosphere of the court with its exaggerated sense of luxury and magnificence.

The architectural elements also register certain significant changes in the marble phase. There is a predilection for curved lines, in place of the rectangular aspect of the buildings of the previous phase, particularly noticeable in the curved outlines of the roofs and cornices—an importation, no doubt, from the Bengal style. The preference for bulbous domes with constricted necks, the tapering outlines of the pillars with voluted bracket capitals and foliated bases, and the foliated arches with many cusps, that represent one of the most distinguishing marks of the phase, all reflect the emphasis for curved lines. These impart, no doubt, a fluidity of line and form to the structures of the period, but at the same time a certain sensuousness, if not voluptuousness, that becomes more and more emphasised.

Though not gifted with the same originality and nobility of conception as that of his grandfather, Shahjahan also was a great builder. His projects were many and compare favourably with those of Akbar in vastness and extensiveness. In Agra and Lahore forts he planned to replace the sandstone buildings of his predecessors by palaces and pavilions in marble, and this he carried out in a very large measure. Not only that, he projected a new capital city at Delhi, that of Shahjahanabad, where he built a fortress citadel of unusual dimensions and erected within it splendid palaces, office buildings and other structures. At Delhi and Agra he built two grand Jami Masjids, wonderfully effective, not only on account of their vast dimensions, but also for their special purposes. To enshrine the remains of his beloved consort he raised up at Agra that grand mausoleum building, the celebrated Taj Mahal, enthusiastically described by many enamoured visitors as a " dream in marble ". Under Shahjahan Mughal architecture reaped a rich harvest; but this was a harvest of plenty that imbibes degeneration. The tendencies, already noted, presage decay, and notwithstanding all the brilliance and splendour of Shahjahan's monuments, students of architecture are agreed in recognising in his buildings signs of the approaching decline of the style.

Shahjahan's alterations and replacements of the earlier palace fortresses were carried on a grandiose scale and apparently inspired by the desire to impart to the palaces and other appurtenances an appearance to suit the prevailing character of the court. In such operations many of the buildings of his predecessors were swept away to make room for his own sumptuous conceptions. They were carried on at intermittent intervals, so that neither the alterations at Lahore, nor those at Agra, follow a symmetrical lay-out and arrangement. Efforts were concentrated upon the production of pretty structures, refined in appearance and ornament, than on any new experiments, either in structural conception or in design. The court chroniclers give detailed accounts of such operations in eulogistic language with many poetic analogies. Though such eulogies may not apply to all these structures, yet a few, by their refined and graceful contours and restrained ornamentation imparting a subdued colour effect to the surface, are not of mean artistic beauty. The art of building still retains its sense of sobriety, but soon to be overcome by a wealth of ornamentation the effect of which becomes overburdening.

In the Lahore fort Shahjahan's erections consist of the Diwani Am, a hall of forty pillars, the Musamman Burz, the Shish Mahal, the Khwabagh and other buildings towards the north-

west section of the fort. Some of these have undergone modifications and elaborations at a later date. Originally, they appear to have belonged to the same style and character as in Shahjahan's other buildings at Delhi and Agra, the emphasis being on marble fabric and picturesque decoration by *pietra dura* and other processes. The appearance of the Shish Mahal in the Lahore fort is especially sumptuous.

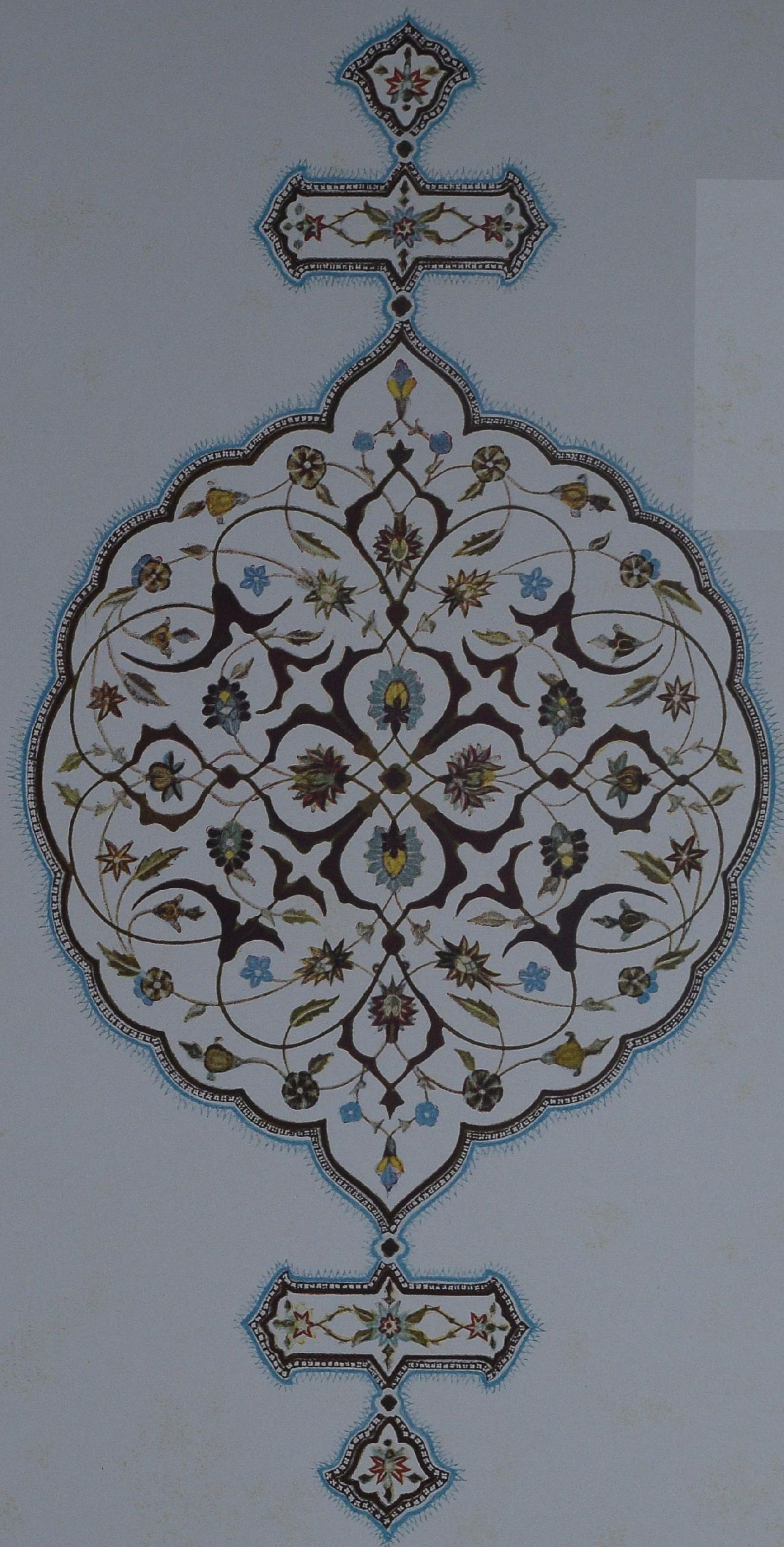
In the Agra fort the remodelling was undertaken on a large and extensive scale. The northern portion of the palace sector in the fort has come under such operation, for which apparently the earlier structures have been swept away. The only undoubted remains of the earlier palaces are the Jahangiri Mahal and fragments of the Akbari Mahal, both situated close to Shahjahan's remodelled section. Nowhere is the contrast between Akbar's architecture and that of Shahjahan so strongly marked as in the Agra fort, the former noble and robust, and the latter elegant and, to a certain extent, feeble.

A doorway from the earlier sector leads to Shahjahan's buildings. It would be difficult to take note of each and every building that were erected during this period, and our observations, hence, will be confined to the most notable ones. Not all the buildings, again, were put up at one and the same time according to a definite scheme. The first to be erected was the Diwani Am, a spacious hall standing at the rear end of an extensive court. It is said to have been built in 1627 A.D., the year of the emperor's accession to the throne. It is in red sandstone finely plastered with stucco of the smoothness of white marble all over, except in the floor and the ceiling. The hall measures 201 feet by 67 feet and is open on the three sides and enclosed at the back. The roof is flat and supported by three ranges of arcades that impart an elegant appearance to the facades as well as to the interior. Near the back wall of the hall there is placed in the middle an alcove of white marble, with inlaid patterns in *pietra dura* in a refined taste, representing the seat of the emperor. Below in front is a marble dais, supported on four legs, meant for the grand vizier. Because of the red sandstone fabric some scholars ascribe this building to Akbar or Jahangir and attribute to Shahjahan only the fine stucco works over sandstone fabric and the throne alcove. But such salient features as the shape and design of the pillars and the foliated shape of the arches leave no doubt of the entire conception being Shahjahan's, possibly one of the earliest of his architectural undertakings when marble was yet to become the irresistible vogue. The Diwani Am in the Delhi fort, it has to be noted, is also in red sandstone, and it is definitely known to have been the work of Shahjahan.

Behind the Diwani Am, and separated from it by the Machchhi Bhavan, stands the Diwani Khas that was erected, according to the inscription it bears, in 1636-37 A.D. It is entirely in marble and consists of an open colonnade with an enclosed hall behind. The double columns of the colonnade are of graceful execution and carry foliated arches. The inlaid patterns in red carnelian and other stones on white marble impart an elegant effect to the wall surfaces.

Close by to the south is situated the sumptuous block of buildings, known as the Khas Mahal with the spacious court of the Anguri Bagh in front. In contemporary chronicles it is called *Aram-gah-i-Muqaddas*, or the Holy Abode of Rest, indicating that it was a private palace intended for retirement and relaxation. The Khas Mahal stands on a marble terrace overlooking the Jumna and consists of three white marble pavilions of elegant design and form.

PLATE—IX.



AGRA : TOMB OF ITMAUD-UD-DAULAH : Painted Decoration on Ceiling.

The middle one, overlooking a court 112 feet by 96 feet, consists of a rectangular building with an open colonnade in front showing five arched openings of foliated shape springing from the piers. Three archways lead from the colonnaded gallery to the inner hall having three windows in the back wall, overlooking the river and opposite to the arched entrances in front. The roof is flat with square kiosks at the corners. According to the *Badshahnama* of Abdul Hamid Lahuri the ceiling was once inlaid with patterns in gold and colour, traces of which still remain. The court in front has a big ornamental pool, about 42 feet by 29 feet, with five fountains. A series of subterranean chambers below this court was intended for retirement during the summer heat. In the north-east corner of the court at a lower level is the Shish Mahal (Palace of Mirrors), a unit of two chambers with arrangements for bath, so named because of the walls and ceilings being spangled with tiny pieces of mirror glass set in gilt and coloured stucco. The reflection of light on this mirrored mosaic is charming and not easily to be forgotten.

On either side of the central building of the Khas Mahal there are two other pavilions, each joined to the central block and by means of doorways. Each is of a similar design and consists of a room at either end with a communicating gallery in between and a screened court in front. The gallery is covered by a curved roof while the rooms have angular canopies. According to the *Badshahnama* these pavilions were once profusely ornamented in gold and colours, while the curved roofs are stated to have been plated with sheets of gold.

In front of the court of the Khas Mahal, at a slightly lower level stands the spacious court of the Anguri Bagh (Vine garden), which is a rectangle of about 220 feet by 169 feet. A red sandstone walk runs round the sides, while two marble roadways traverse the rectangle from the middle of each side and intersect in the centre which is widened to an extensive terrace accommodating an ornamental pool with fountains. The four smaller rectangles thus formed are divided into numerous pleasingly patterned parterres by sandstone ridges. Except in the east where it faces the Khas Mahal, the court is enclosed on the other three sides by double-storeyed chambers built of red sandstone with marble facing in some of them. The sandstone fabric and the plan may lend some illusion to their being the work of Akbar, but the foliated arches leave no doubt that they were erected during the regime of Shahjahan.

Close by, and communicating with the northern pavilion of the Khas Mahal, is the Musamman Burz (Octagonal Tower), known also to some as the Saman Burz (Jasmine Tower). It is an exquisite structure because of its inlaid patterns and marble filigree, both indicating a high degree of technical craftsmanship and sense of ornamentation. Like a fairy bower it overhangs river and presents a wide vista along the river front. It was here that the captive emperor, Shahjahan, breathed his last in 1666 A.D. with his eyes turned steadfastly on the pearly dome of the Taj Mahal. Some scholars are of opinion that it was built by Jahangir. But the court chronicler, Abdul Hamid Lahuri, distinctly says in the *Badshahnama* that on the site there was a house erected by Akbar which was pulled down by Jahangir to make room for a structure that was subsequently dismantled by Shahjahan and replaced by the present monument intended as the residence of his beloved empress, Mumtaz Mahal.

A little apart from the group described above stands the Moti Masjid (Pearl Mosque), described by Fergusson as "one of the purest and most elegant buildings of its class to be found any-

where". Situated on a high ground it commands a fine view of the palaces and courts. Completed in 1654 A.D., it consists of the usual open courtyard with an ornamental cistern in the centre and surrounded by cloisters on the three sides and the prayer chamber or the sanctuary in the west. The entire building is of pure white marble raised on a stylobate of red sandstone. It occupies a quadrangle, 234 feet by 187 feet externally, and is approached by three gateways, one in the middle of each side. The view of the interior, an unbroken whiteness, in and out, above and below, is surprisingly beautiful and comes as a surprise after the prevailing red glow outside. The prayer chamber on the west, 159 feet by 56 feet internally, opens on the court by seven foliated arches of great beauty and is accessible at both ends from the private apartments through marble screens of exquisite workmanship. The prayer spaces are marked on the floor by inlaid strips of light yellow marble, the only attempt to colour effect in the whole building. The receding views of the interior arcades are also supremely beautiful. The roof is surmounted by three graceful domes of bulbous shape, the central one with a subtly raised elevation in relation to the two others at the flanks. At each corner rises an elegant octagonal pavilion crowned by a cupola, while a range of light kiosks line the parapet in front. In its flawless whiteness, in refined architectural proportions, in the skilful modulation of the various elements, including a charming variety imparted to the skyline, and in the masterly technique in which the materials has been manipulated, the Moti Masjid at Agra has a remarkably restrained beauty, in contrast to the rather florid appearance of the residential and office buildings. Its outstanding qualities illustrate Shahjahan's building style at its peak.

Shahjahan's architectural predilections did not rest content with the remodelling of the structures of his predecessors and clothing their ideas in costly marble and rich ornament. In 1638 he began at Delhi the erection of a new capital city, that of Shahjahanabad, to contain within its precincts a sumptuous palace fortress for the accommodation of the imperial household and court. The city was of the shape of a quadrant on the right bank of the river Jumna, with the palace at an apex of the river and the grand congregational mosque, the Jami Masjid, at an angle formed by the two wide streets traversing from the main gates of the fortress to the city gates. This palace fortress, the Red Fort as it is known because of the red sandstone fabric of its rampart walls, has been designed on an unprecedented scale with all the amenities of a busy and luxurious life of an imperial house and court provided for within its walls in a regular and systematic order. Built at one time by one of the most splendid of the Mughal emperors, it excels the other Mughal palaces in the largeness of its conception, in the uniformity of its arrangements and in the magnificence of its execution.

The fortress with its halls, palaces, pavilions and gardens was completed in 1648 A.D. when on an auspicious day the emperor entered it ceremonially and formally inaugurated it. It remained the seat of the Mughal government for more than 200 years and though much shorn of its one-time glory and splendour, it still stands as a witness to the many vicissitudes that befell the empire of the Grand Mughals.

The fortress is planned in the shape of an irregular parallelogram, with the angles slightly canted off, and measures 3200 feet by 1600 feet, exclusive of the gateways. It is encircled by a massive rampart wall of red sandstone, relieved at intervals by boldly projecting bastions with kiosks on the roof. It has two main gateways, one in the middle of the western wall and the

other in the south. The former, known as the Lahore Gate, faces the Chandni Chauk of historic memory and forms the principal entrance. This portal leads to a wide arcaded passage that opens into an open square courtyard of 350 feet side, from either end of which arcaded passages run north and south, the former leading to the gardens within the palace enclosure and the latter to the south gate, known as the Delhi Gate. This arrangement encloses on the east, a rectangle, occupying nearly two-thirds of the fortress area, and accommodates an orderly array of the most sumptuous buildings and gardens arranged into a regular system of squares and rectangles, planned and designed by the emperor himself. Thus rose the most magnificent palace, the last and the finest of the Grand Mughals.

At the eastern end of the above-mentioned square quadrangle is the Naubat Khana (Music Gate-house) leading to a great rectangular court, 550 feet by 385 feet, with the hall of the Diwani Am at its eastern apex. This hall of public audience has been designed in a stately manner to suit the solemn functions that were held there. The spacious court in front was originally surrounded by colonnades that imparted an impressive grandeur to the entire setting. The hall is built of sandstone, but originally covered with shell plaster, polished to the smoothness and whiteness of ivory, in keeping with the white marble structures that stand around. It is a colonnaded hall open on three sides and enclosed at the back, the facade showing an arcade of nine foliated arches springing from double columns in the middle and from four at the corners. The interior corresponds to the facade in having similar arcades in three aisles, while set in an alcove near the back wall is the white marble canopied platform, richly inlaid with precious stones, intended for the imperial throne. The superb magnificence of this throne platform, known as the *Nashiman-i-Zill-i-Ilahi* (the Seat of the Shadow of God), at once visualises the splendid pageant of the Grand Mughals in days of their supreme brilliance. The recess behind the platform is covered by panels of *pietra dura* work, attributed to one Austin de Bordeaux, which, though rich and fine in execution, cannot be said to have been quite fitting amidst the setting that is entirely eastern in design and appearance. The hall was richly "painted and covered with gold", but all such costly decorations have since vanished.

On either side of this public edifice and at the back along the eastern rampart wall overlooking the river the whole area is laid out into buildings, courts and gardens, the area to the south possibly occupied by the private apartments of the zenana, and that to the north by halls, pavilions, courts and gardens, with the magnificent Rang Mahal in the centre connecting the two blocks. The halls and pavilions in both the blocks are lined along the rampart wall on the east and face the courts and gardens on the west. Along the entire length run beautiful channels of crystal water, widening out at intervals into ornamental pools with fountains. A constant supply of water was obtained from the Jumna, seventy miles up the river, brought to the fortress by the canal of Ali Mardan, and introduced into the palace precincts through an artistically scalloped marble cascade placed near the Shah Burz in the northern extremity of the eastern wall.

It will be difficult to discuss each and every element of this sumptuous conception. The palaces and halls along the eastern wall represent the most resplendent creations in white marble and in these the highest skill was lavished, particularly in decorative treatment. With a succession of turrets, kiosks, golden domes, projecting balconies overhanging the sandstone ramparts,

they present a fine view from the river, the three towers—the Asad Burz and the Shah Burz at the two corners and the Musamman Burz in the middle—raising up their heads in bold fashion above the tops of the other pretty structures and imparting an attractive variety to the skyline along the river front. The inside with the picturesque gardens with fountains, flower beds, pavilions placed within ornamental pools, and the *Nahr-i-Bihisht* (the stream of paradise) with its rippling water traversing the palace area, represents also a fine and magnificent setting for these superb structures. All combined, we have in the sumptuous lay-out and arrangement of the palace area a confirmation of the truth of the Persian couplet inscribed on the Diwani Khas that "if there is a paradise on the face of the earth, it is this, it is this, it is this."

In design and style the structures are approximately identical. We have usually a single-storeyed hall, open on all sides, the interior being divided into a number of bays and aisles by massive piers carrying foliated arches and supporting the flat roof. The ceilings were once plated with silver or gold, and the interior surfaces, including the piers, arches and walls, are richly ornamented with precious inlay, low relief carving, or patterns in colour and gold. Everywhere there is an emphasis on costly splendour and sumptuous ornamentation, and the latter, though at times having an appearance of exuberance and overburdening, illustrates the highest and the most perfect skill in technical craftsmanship. The intricate tracery of the screen bearing the "Scales of Justice" shows in the fineness of its design and the flawless accuracy of its execution fine needle work of an embroiderer transferred by the chisel of the stone-cutter on the hard fabric of marble.

Two buildings, representative of the style, may briefly be referred to for an idea of the grandeur and brilliance of this sumptuous palace conception. One of them is the Diwani Khas (the Hall of Private Audience), an indispensable feature of Mughal court life, in which audiences and conferences of a special and distinctive character were held. The other is the Rang Mahal (Palace of Colour) intended for the delectation of the emperor and his household after a busy and tiring day. Both belong to the same general style that we have already described; but these two excel the other buildings in having the most lavish ornamentation and costly splendour strewn over all the interior surfaces with almost an overbearing effect.

The Diwani Khas, also known as the Shah Mahal, is an open colonnaded hall in one storey enclosed by marble traceries at the back. The front consists of a fine arcade of five foliated arches springing from massive piers, with similar arches, but of varying sizes, on the two sides. The interior is divided into bays and aisles by massive piers carrying foliated arches that support the flat roof, at the top of which may be seen a beautiful kiosk at each corner. The building is entirely in white marble; but the chaste and elegant appearance of the facade is lost in the interior in a bewildering maze of rich and lavish ornamentation distributed over every available space in brilliant colour, lustrous gold and costly *pietra dura*. The ceiling also was originally plated with gold patterned with arabesques and flowers, but it has since disappeared. Fergusson considers it to be "if not the most beautiful, certainly the most highly ornamented of all Shahjahan's buildings".

But even this splendid hall appears to recede to the background by the Rang Mahal, known as the Imtiyaz Mahal or the Palace of Distinction in Shahjahan's time, and described by a modern

scholar as "the crowning jewel of Shahjahan's seraglio". Its sumptuous conception confirms the statement of the court chronicler that "in excellence and glory it surpasses the eight-sided throne of heaven, and in lustre and colour it is far superior to the palaces in the promised paradise". Very few traces, however, remain of its original elaborate decoration, but there are still enough to enable one to visualise its former splendour and magnificence. Externally the building measures 153 feet by 69 feet, and the interior consists of a main central apartment with smaller chambers at either end. Foliated arches on massive piers divide the central apartment into a number of bays, each 20 feet square. Along this central apartment runs a marble water channel expanded into an ornamental fountain basin in the central bay. It is a part of the elaborate water system of the *Nahr-i-Bihisht* that reaches its most enchanting expression in this Palace of Colour and adds to its beauty a supremely magnificent manner. The basin is designed in the shape of a large lotus flower with delicately modelled petals enclosed within a shallow, but exquisitely patterned, square frame. In the centre, on the pericarp of the lotus, is again a small flower through which the water of the fountain bubbles up, "enhancing the pleasantness of the suroundings and adding to its beauty", as recorded by Muhammad Salih, the historiographer of Shahjahan. The picturesque account of this fountain by Saiyad Ahmad Lahuri in the *Badshahnama* is also interesting and may profitably be quoted. He says that the Rang Mahal "has a tank, the beauty of which baffles description. It is made of marble and fashioned in such a way that it resembles a full blown flower. Its inlay of flowers and foliages in various coloured stones has been so finely executed that it is beyond the power of any one to describe it. Although the tank is seven *gaz* square, yet it is of very little depth. It is just like the palm of a hand. The particular beauty of this is that when it is full of rippling water, the foliage of the inlay work appears to wave to and fro. In its centre is a beautiful flower like a cup of marble; moreover, on each curving point and arched cusp, flowers and leaves of coloured stones spring from creeping plants, and creeping plants from flowers and leaves. Within the cup you will find a hole through which the water bubbles up from a hidden channel underneath. The sheet of water falling from the edges of the cup and the waving of the plants and flowers under the dancing water are nothing less than a scene of magic."

In keeping with the highly ornamental character of this fountain, the central feature of this elaborate composition, the whole interior of the building was gorgeously decorated by painting, gilding and *pietra dura,* and the traceried marble screens, originally enclosing the arches on the outside and separating the central apartment from the chambers at the sides, were of much intricate decorative workmanship. According to Muhammad Salih the original ceiling was "gilded and ornamented with golden flowers"; but this was apparently replaced by a silver one that was removed in the reign of Farrukhsiyar "to supply a pressing need" and substituted by one of copper. Again, in the reign of Akbar II the copper ceiling was taken off and a wooden one put up in its place. The Rang Mahal was one of the most sumptuous conceptions of Shahjahan, truly representative of the splendour and magnificence of the Mughal court at the highest peak of its brilliance, and such acts of spoliation, noticed also in other buildings of the fortress, reflect in a poignant manner the decadence that usually follows a peak of plenty.

The grand Jami Masjid at Delhi, the largest and the most well known in the whole of India, forms also an essential element of the scheme of the new city of Shahjahanabad. Begun in 1644, it was completed in 1658 when Shahjahan had already ceased to reign. It is of the usual

orthodox plan of an open courtyard with ranges of cloisters on three sides and the prayer chamber on the west. The courtyard has in the centre a reservoir of water for ritualistic ablution and is approached by three gateways, one in the middle of each of the three cloistered sides. Its impressiveness is due to the vast scale in which it has been designed and the manner in which each part has been disposed in relation to the other. The entire structure is raised over a lofty basement with majestic flights of steps leading to the imposing gateways that tower above their surroundings; and added to these, the substantial corner turrets, each with a domed pavilion at the top, and the tall *minarets,* flanking the facade of the prayer chamber, impart an effect of noble height and dignity to the external appearance of the composition. In the interior the immense quadrangle surrounded by arcaded cloisters, each interrupted in the middle by the rear face of the gateway, and the superb sanctuary with its varied elevations create an effect of spaciousness combined with a rich variety in composition in which all the parts are pleasingly co-ordinated to one another so as to produce a unified and impressive design. At the same time it has a severe and imperious aspect, and "the uncompromising rigidity of its long horizontal lines, the harsh black and white inlay of its domes and minarets, its very vastness which necessitates unending repetition of each detail, all combine to give this otherwise magnificent structure a character which never wholly attracts."

Almost simultaneously another congregational mosque was erected at Agra, just outside the Delhi gate of the fort. It is said that Shahjahan put it up to please his favourite daughter, the accomplished princess Jahanara. It is neither so large, nor ambitious, and lacks the impressive grandeur of its counterpart at Delhi. The facade is divided, not by foliated arches, but by those of the so-called "Tudor" type; the three domes, without necks at the springs, lack the height and fluidity of contour; and there are no tall *minarets* to add to the effect of elevation. Yet, its merit depends on its pleasing proportions, the admirable distribution of the arches of its facade, the slender pinnacles intermingling with the beautiful kiosks with varied elevations lining the parapet and the zigzag ornament in white marble on the domes. The Jami Masjid at Agra has an emotional character in contrast to the severe and imperious appearance of its counterpart at Delhi.

But all these architectural projects of Shahjahan are thrown into shade by that superb conception of the mausoleum that the emperor raised up at Agra to enshrine the mortal remains of his beloved consort, Arjumand Banu Begam, styled Mumtaz Mahal. The Taj Mahal, as it is known after the title of the empress, stands on an elevated ground on a bend of the river Jumna, so that it has a fine view from whatever angle it is seen. As usual, the conception takes the form of a garden tomb, the whole being placed within a rectangular court enclosed on all sides, except that on the river front, by a high wall with octagonal turrets, surmounted by domed pavilions, at the corners, and a grand portal in the middle of the southern wall. The rectangle of the court is aligned north and south with the garden occupying a square of about 1000 feet side on the south and the raised terrace of the tomb building and two other accessory structures in the oblong portion at the northern end overlooking the river. The design is, to a certain extent, unconventional, the plan of the court being rectangular, not square, and the tomb itself being situated, not at the centre of the court, but at one end. What impresses the visitor is the beautiful harmony that exists among all the parts of the conception. All arrangements, beginning from the entrance gateway, lead on, and converge to, the main theme of the

entire composition, namely the superb mausoleum building poetically described as a "tender elegy in marble".

The entrance gateway, rising up to a height of 100 feet, is by itself a monumental composition and has been called "a worthy pendant to the Taj itself". Its central archway gives a magnificent vista, a framed picture so to say, of the snow-white mausoleum building standing at the farthest end. The facade is divided into an enormous arched alcove within a rectangular frame, with a similar smaller fronton in two storeys on each side and a turret with a domed pavilion at each corner. The red sandstone fabric is profusely inlaid with white marble and mosaic of precious stones. Along the frame of the central alcove are inscribed Quranic texts in black letters inlaid on white marble ground in such a manner that the letters appear to be of the same size throughout the entire height. The black marble inlay of inscriptions on white marble surface constitutes one of the most effective ornamental motifs in the decorative scheme of the Taj Mahal and may be seen to have been used with the charming elegance of an embroidery, not only on the gateway, but also on the mausoleum building itself. The arched alcove opens into an octagonal chamber with a smaller roof on each side and a staircase at each corner leading to the upper storeys.

The gateway building descends down to the square court laid out in the formal pattern of a Mughal garden. Two ornamental channels of water with rows of fountains and flanked by marble walks run along the middle of the square expanding at the point of intersection into a wide raised platform with a reservoir of water and ornamental fountains. Avenues of cypress trees line the marble walks backed by foliage and flowers in small square parterres. The arrangement, though strictly conventional, is balanced and harmonised in such a way as to fit in with the architectural elements and to furnish a beautiful setting and perspective to the mausoleum building that stands in the centre of the northern end of the court. As Edwin Arnold says, "the garden helps the Tomb, as the Tomb dignifies the garden".

At the northern end of the garden is situated the red sandstone terrace extending to the wall east and west. The tomb building stands in the centre on its own marble platform, flanked by two subsidiary structures on either side. That to the west is a mosque, and the corresponding one to the east has no special significance, but is provided for to ensure symmetry, the *jawab* as it is known. Their situation and elevation are so judiciously disposed as to bring into full and fine relief the snow-white tomb building in the centre.

The marble terrace of the mausoleum building stands on the red sandstone terrace and is exactly 313 feet square and a little over 22 feet in height from the garden level. It is approached by two flights of steps concealed within a passage in the middle of the south side. At each corner stands a stately white marble *minaret* in four storeys ending at the top in a neat pavilion crowned by a graceful dome. The total height from the garden level is a little over 162 feet. The tomb building rises abruptly from the centre of this substantial terrace and externally is a square of 186 feet side with each corner canted off. Each facade consists of a huge arched alcove set within a rectangular frame in the centre flanked by similar arched recesses in two stages on either side and at the chamfered angles. The entire facade is richly ornamented by Quranic texts in black letters on white surface within rectan-

gular bands and flowers, arabesques and other patterns in precious inlay. In elevation the scheme resolves into two parts, each approximately of equal height, the lower consisting of the enormous facades with chamfered corners forming the ground storey, and the upper of the milk-white soaring dome with its encircling pavilions. The total height of the building from the garden level is over 200 feet, no doubt a remarkable achievement carried out in effeminate marble. The horizontal and vertical aspects of the building have been so pleasingly combined as to render the external appearance and elevation perfectly balanced and harmonised.

The interior arrangements of the building are equally pleasing and illustrate the sense for a unified and balanced design. In the depth of the marble terrace is accommodated the subterranean crypt containing the graves proper. Above we have an octangonal hall in the centre, forming the cenotaph chamber, with two-storeyed apartments, one at each angle, all linked up by radiating passages and corridors. The cenotaph hall is covered by a vaulted ceiling, just below the central dome, while the angle apartments have each a domed pavilion over the roof of the second storey. Light is admitted into the interior by double perforated screens of white marble set in the arched recesses. In the centre of the octagonal hall and marked off by an octagonal rail of trellised marble of exquisite beauty and workmanship lies the cenotaph of the empress with that of Shahjahan placed by its side on the west. It is said that the emperor planned to erect a black marble monument as his last resting place on the opposite bank of the Jumna, the two to be linked up by a bridge over the river. But the vicissitudes of his last years prevented the scheme being materialised and he lies beside his beloved queen in the monument that was solely intended for her. The cenotaphs are composed of lovely white marble of the most transcendent kind and are covered all over with the most beautiful ornamentation in costly *pietra dura*. The marble railing around the cenotaph is said to be a later replacement, the original having been one of gold set with jewels.

It is impossible within the short space at our disposal to convey even a cursory idea of the exquisite ornamentation of this beautiful edifice. The charming effect of the Quranic inscriptions inlaid in black letters on white marble has already been alluded to. They appear on the facades and also on the interior surfaces in bold and effective bands. Certain elements of the building are embellished with patterns in low relief, but all such ornamentations are kept subservient and without any plastic emphasis so as not to disturb the effect of the smooth white fabric of the building. The decorative scheme consists principally of floral and arabesque patterns in costly *pietra dura*. In contemporary records we have an account of as many as forty-two kinds of stones having been used in *pietra dura* ornamentations and the infinite skill of the workmen is clearly evident in the perfect and finished execution of the patterns, ranging from the broad scroll-works on the arch spandrils, soffits, etc. to the tiny floral motifs on the cenotaphs and the marble grille encircling them. The numerous shades of this rich kind of ornamentation are so elegantly blended that even a close observation and scrutiny fail to discover the points of unison in any part, though a powerful microscope might detect as many as seventy to ninety such pieces in the composition of a single small flower. The marble trellises with their variety of patterns show also an inimitable delicacy of carving along with a fine sense of effective design. The structure and its ornament are in perfect unison with each other, and the balanced design of the entire conception and its beautiful setting have almost a universal appeal.

PLATE—X.



AGRA : TOMB OF ITMAUD-UD-DAULAH : Spandril over door, south oblong room.

In the construction of the Taj the builders also show a perfect mastery of technique, as is evident in every lineament of this snow-white pile. The solid foundations and substructure of the terrace on the river front are, in themselves, feats of remarkable engineering skill, and the practical soundness of the system that prevailed among the Mughal builders for construction of compact masonry foundations is apparent in the fact that in spite of its situation on the river that continually laps its side, the monument has not suffered a single damage or deviation due to a set-back in the foundation. The overhang of the great dome indicates a knowledge of the principles of tension, stress and strain on the part of the builders, and at the same time imparts an appearance of surprising lightness and soaring height to the whole building which becomes more apparent the farther one recedes from it. The harmonious grouping of pavilions of apparently indigenous derivation around a dome of evidently Persian extraction illustrates a sense of balanced design and the rustication on the face of the tall *minarets* produces a subtle contrast to the smooth texture of the mausoleum building situated in the centre of the area marked by them. As a writer observes, the *minarets* serve as sentinels over the structure that stands within, as if keeping guard over its fair beauty.

By its stately and perfect proportions, the delicacy and purity of its lineaments, its milk-white texture assuming different hues at different times and under different conditions, and, lastly, by its picturesque setting aided by the ingenuity of man, the Taj Mahal at Agra stands as a creation of superb beauty and magnificence not only in Mughal architecture, but in Indian architecture as a whole. There have been controversies regarding the designer of this lovely monument and a statement of Father Sebastian Manrique was responsible for initiating a belief that the Taj owes its design to a Venetian, Geronimo Verroneo. This belief, however, is unwarranted as the design is wholly eastern, and in India a near prototype is recognised in the Tomb of Humayun at Delhi. The Taj is just the culmination of the tradition, first noticed in Humayun's tomb and later on continued in the Tomb of Abdur Rahim Khan-i-Khanan, also at Delhi. It fits into a perfectly logical cycle of the evolution of an Indian design. There are contemporary accounts enumerating the names and respective salaries of the builders, artists and craftsmen responsible for the creation of the monument, the chief among them being *Ustad* Isa who according to one account hailed from Shiraz, and according to another, from Agra. The garden, though typically Mughal, was the work of a Hindu garden planner. The attribution of the *pietra dura* ornamentations to a French jeweller, named Austin de Bordeaux, has similarly to be discountenanced, as this task is stated to have been entrusted to group of Hindu craftsmen, chiefly from Multan and Kanauj. The list of the principal masons, artists and craftsmen, together with the countries of their origin, indicate how the whole eastern world was laid under contribution in the production of this mausoleum that still stands as a notable creation in the entire range of eastern architecture. As the development of an Indian style the monument belongs to India, and has an Indian appearance and character, in spite of the hands of so many foreign workmen.

With its luminous beauty and its picturesque setting the Taj has been attracting enamoured visitors from far and near, and each one has a reaction according to his own emotions and sensibilities. Not a little of its appeal is due to the fact that here we have an emperor's love given concrete shape in stone, his grief for his beloved materialised into a monument of snow-white texture and uncommon grace and elegance. This romantic association has added to its

human interest and to its universal appeal. We have many beautiful eulogies in praise of this superb monument, but they all appear to have been swayed, to a certain extent, by the romantic story behind its creation. Our poet described the Taj as a "tear drop" wrung from the sorrowing heart of the emperor. Similar sentiments seem to inspire such romantic statements as that of Bayard Taylor who spoke of the Taj as "a fabric of mist and moonshine with its great dome soaring up like a silvery bubble". Many a spectator has seen in the monument the fairy-like beauty of Mumtaz Mahal materialised in marble and such reactions as the following poem from the pen of an Englishman of the early eighteenth century are also not uncommon.

"Oh thou! whose imperial mind could raise
This splendid trophy to a woman's praise:
If joy or grief inspired the bold design,
No mortal joy or sorrow equalled thine!"

With its milk-white texture and purity of lineaments, the Taj has, no doubt, a beauty of its own. Its picturesque situation and every arrangement, so contrived and designed as to concentrate on the structure itself, have added to its charm. Its subtle proportions and varied ornaments, perfectly executed and finished, represent the highest skill and are themselves satisfying. Added to these there is the romantic appeal. The Taj enchants the eye and fills the heart with reverence for an undying love that could find eloquent expression in mute marble. The poetic eulogies bestowed on the Taj ever since its completion will indicate that through the successive ages it has been considered and viewed more as a monument of immortalised love and materialised sorrow than as a creation of architecture. It is emotions of this kind that prevent a dispassionate study of the monument and its place in the history of Mughal architecture. When so viewed its beauty and perfection are found to be of an illusive kind. Its specialised glamour tends to wear thin on a close analysis. What strikes the critic first is the inappropriateness of the material in relation to its magnitude, and the impression of a precious miniature casket being magnified into a monumental size appears to be inevitable. Its effeminacy is apparent, and no amount of praise as its being the tribute to a woman of uncommon grace and beauty can justify the inherent weakness and lack of strength which, as already observed, constitute the spirit of the time. The purity of its outlines is nothing short of a rigidity and the lack of variety in its architectural forms is striking. Aldous Huxley recognises in the composition of the Taj a "poverty of imagination" which, again, is apparent when the monument is viewed more closely. There is, again, a lack of shadow along its front and flanks imparting, to a certain extent, a sense of monotony. The elaborate and costly ornamentations are, no doubt, exquisitely done, but close at hand they appear restless and overrich. It is hence that a distant view of the monument is the most successful as it brings into magnificent relief the snow-white monument amidst a gorgeous setting of luxuriant garden with its rippling water courses reflecting the throbbing monument against the background of the horizon. It is not so much a triumph of architecture, as of splendid decorative setting, and to this the monument owes much of its charm and beauty.

DECAY AND EXTINCTION

With Aurangzib's accession to the throne the rich harvest in building art was over. It may appear that the prolific and ceaseless output that characterised Shahjahan's regime brought in a natural exhaustion and the decay of the Mughal architectural style followed as a matter of course. Signs of decadence were, however, evident even before the reign of Aurangzib in a weakening of the architectonic design and in the tendency to sumptuous decoration and lavish expenditure in material. Mughal architecture displayed the full vigour of a progressive style during the time of Akbar; but after him it degenerated into a style "that was sweet rather than strong, and dainty rather than dignified". Shahjahan indulged his artistic taste in extravagantly ornate buildings. His palaces, halls and pavilions, with their effeminate forms and precious inlay, give at their best a picture of decadent splendour and belong rather to the category of exquisite *bijouterie* than architecture. In spite of the brilliance of his architectural undertakings, he could not contribute any new idea or form to the Mughal architectural style. None of his buildings is characterised by an intellectuality in design, and even such impressive creations as the Jami Masjid at Delhi, the Moti Masjid at Agra, or the splendid Taj Mahal fail to rise above the contemporary flavour of effete and overstressed magnificence.

The reign of Aurangzib saw the rapid dissolution of the Mughal architectural style. "There are few things", says Fergusson, "more startling in the history of this style than the rapid decline of taste that set in with the accession of Aurangzib". The empire of the Grand Mughals reached a tottering height during his reign and the inevitable crash was not long to follow. Symptoms of disintegration were apparent even during his lifetime and with his death vanished the splendid imperial fabric raised up by the great Akbar. It is natural, hence, that during these declining days all forms of cultural activity languished. Aurangzib's own temperament seems to have contributed more to the rapid decay of the architectural tradition than any of the natural causes. His austere puritanism gave little encouragement to art, and his narrow bigotry tried to exclude all non-believers from participating in the construction of monuments of the Islamic faith and for the use of the believers in Islam. Mughal architecture, we have already observed, had its foundation in the days of Akbar on a happy and fruitful collaboration among diverse ideas and techniques, and much of its character as a national art movement depended on the capacities and achievements of the indigenous ideals and traditions in adapting the other trends and elements to the requirements of the new style. In the later phase of Mughal architecture there was noticed a slow and gradual isolation from the indigenous inspiration thereby leading to a poverty in architectonic design and loss of structural dignity. Still, the technical skill and efficiency of the indigenous artists and craftsmen were recognised both by Jahangir and Shahjahan who utilised their services a good deal. With the advent of Aurangzib even this stopped and the style was practically nipped at the source. When the indigenous source dried up the style disintegrated with phenomenal rapidity.

The productions of Aurangzib's reign are few and are of a decidedly inferior quality. Two mosques, erected during his reign deserve brief mention. The first is the Moti Masjid within the Delhi fort, put up to enable the emperor "at various times of the day or night to pay his

devotions without the trouble of a retinue or long journey." It is a small but graceful structure in marble of the most polished kind. The curved eave over the central archway of the sanctuary is noteworthy, and curves seem to predominate also in the rounded contours of the domes. At the same time it has a restrained beauty, and being erected towards the early part of Aurangzib's reign appears to reflect, to a certain extent, the flavour of Shahjahan's buildings. The Jami or the Badshahi mosque at Lahore, built in 1674 A.D. by Aurangzib's Master of Ordnance, Fidai Khan Kuka, was a more vigorous composition and has an imposing appearance, in spite of the partial collapse of a few of its eight *minarets* which constitute the chief feature of its design. Though not comparable to the Jami Masjid at Delhi, either in scale or in effect, the broad quadrangle of this mosque with the arcaded facade of the sanctuary in red sandstone crowned by three white marble domes has a certain dignity. Perhaps because of their orthodox character these two mosques have some semblance of the former achievements, but at the same time there are symptoms of the approaching dissolution. The spirit of the style had declined.

The Tomb of Aurangzib's queen, Rabia-ud-Daurani, at Aurangabad illustrates in a pathetic manner the rapid deterioration of the Mughal architectural style. Erected in 1679 A.D. it is a frank imitation of the celebrated Taj Mahal at Agra though on a smaller scale. The difference between this tomb, known as the Deccani Taj Mahal, and Shahjahan's masterpiece is striking for so short an interval that separated the two monuments and shows in an effective manner the extent of the deterioration and the impoverishment of the style. Like the Taj Mahal at Agra we have in this tomb a domed structure in the centre raised on a terraced platform with four tall *minarets* at the four corners. The lay-out of the garden is also practically the same. The composition lacks, however, the subtle and satisfying proportions of the Agra monument, and the weak foliations of the arches and meaningless ornaments strewn all over its surface lend it almost an insipid appearance. Further, the upper elevation with its central dome, surrounding pavilions and quoins has a confused and congested appearance. Compared to the Taj Mahal, the Tomb of Rabia-ud-Daurani is not only a very mediocre production, but also, as Fergusson says, "narrowly escapes vulgarity and bad taste."

With the death of Aurangzib in 1707 A.D. the Grand Empire vanished under a maze of fratricidal struggles, ignominous internal intrigues and intrepid foreign aggressions. With it collapsed also the splendid pageant of the Mughal court. New forces had been making their appearance and along with them impacts of new ideas and cultures. The life and spirit of the Mughal architectural style had already left and the outer shell also collapsed. The final phase of this style may be seen in the Tomb of Safdar Jang at Delhi, erected in about 1753 A.D. The design was inspired by the classic Taj Mahal and its remote ancestor was the Tomb of Humayun, situated a little apart. Humayun's Tomb initiated a movement that culminated into a magnificent expression in the snow-white Taj Mahal at Agra. The Tomb of Rabia-ud-Daurani at Aurangabad is one such travesty and Safdar Jang at Delhi is another. This latter monument is the final effort to recall the old spirit of the style; but in this it fails miserably. There was no hope of recovery even of the old glamour, and the architectural style associated with the name of the Grand Mughals became extinct long before the last of the dynasty was pushed out of his titular sovereignty.

PLATE XI.



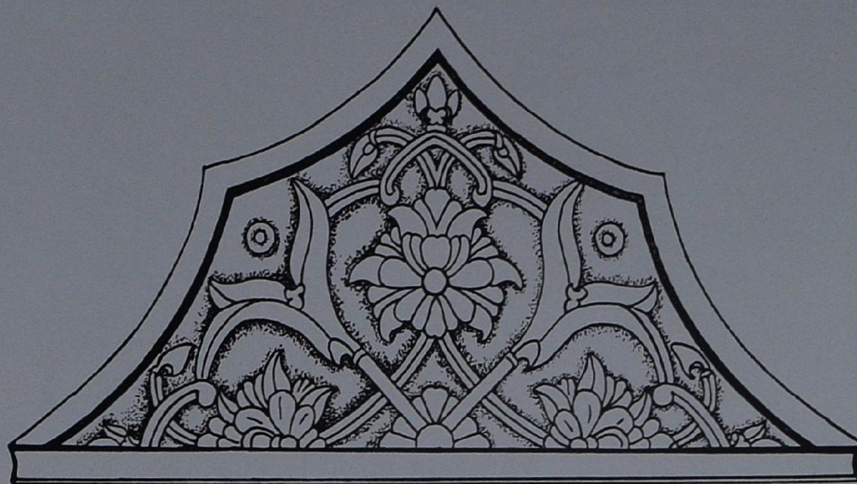
SHAHDARA, LAHORE : TOMB OF JAHANGIR : Details of Mosaic Work.

The Illustrations

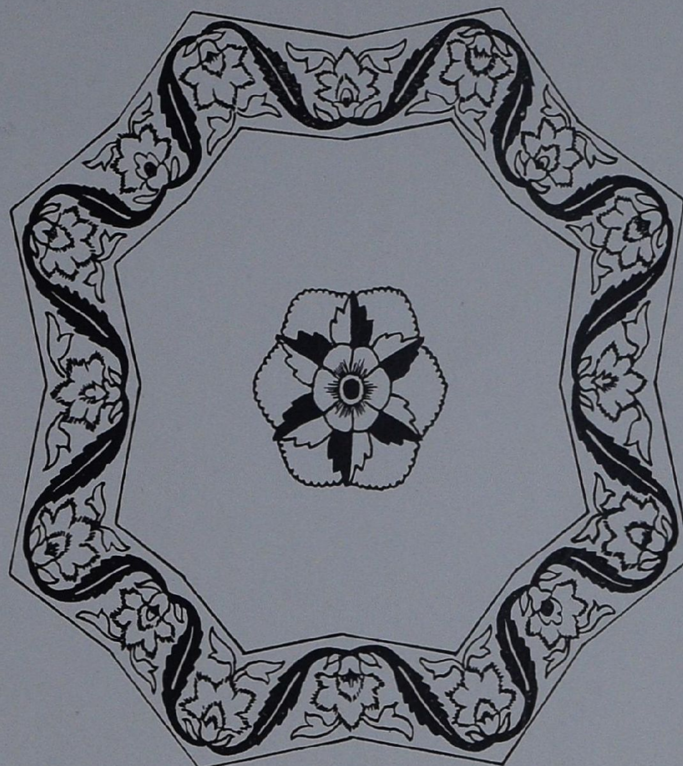
THE line drawings and etchings assembled here are reproduced from the records of our survey to give fresh inspiration to artists, designers, architects and craftsmen of our own time. The same motifs will necessarily undergo transformation in the hands of other artists and designers, who will, moreover, be guided in their interpretations by the particular use to which the motifs are to be put.



Sikandra; Tomb of Akbar; Line drawing from colour decoration; Door of passage



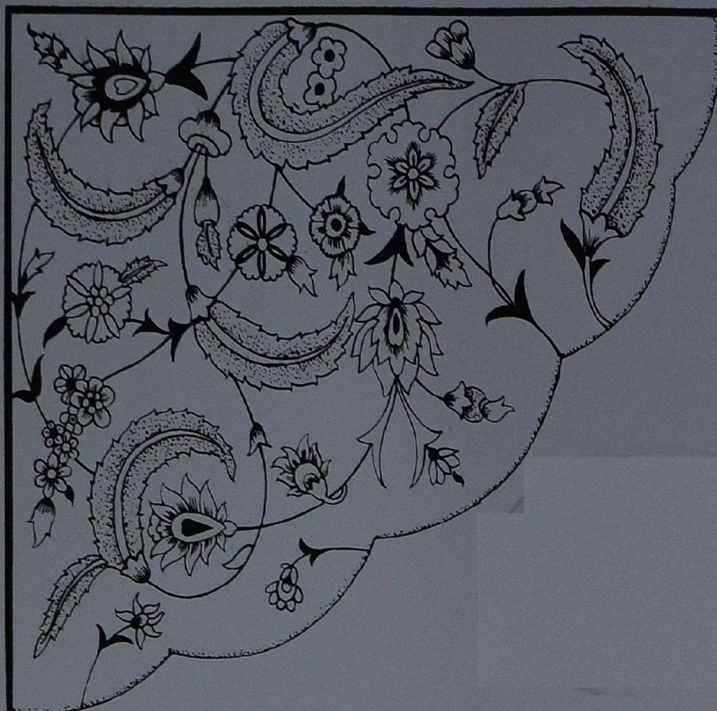
Fathpur Sikri; Floral Design below the cornice; The Jami Masjid



Fathpur Sikri; Floral string and geometric patterns inside the main enclosure; Salim Chishti's Tomb



Fathpur Sikri; Soffit of drip-stone; Turkish Sultan's House



Sikandra; Tomb of Akbar; Drawing from colour decoration on the vestibules



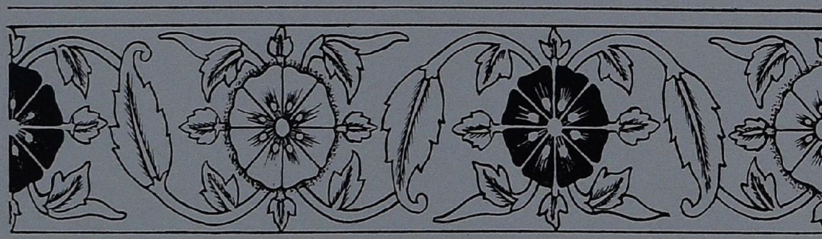
Fathpur Sikri; Decoration upon Architraves around entrance to the Cenotaph Chamber; Salim Chishti's Tomb



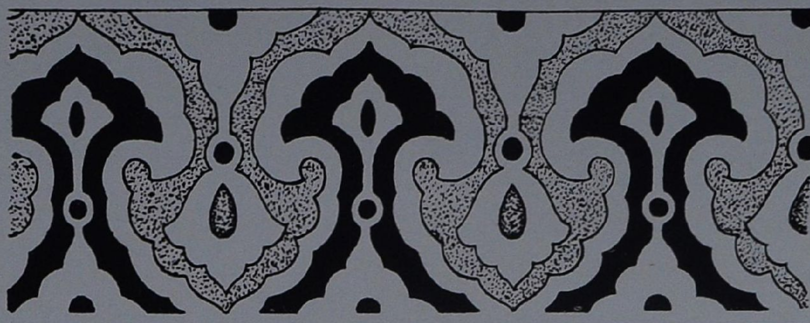
Fathpur Sikri; Decorative patterns on an arch; Prince Salim's Tomb



Fathpur Sikri; Floral string on the base of the pilaster; The Great Masjid



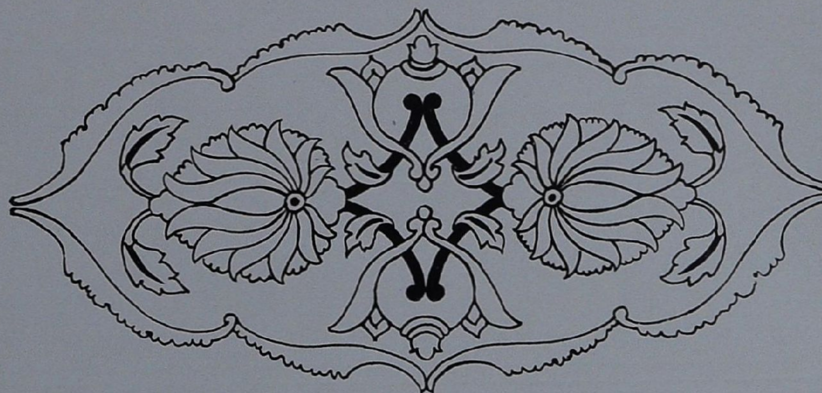
Fathpur Sikri; Drawing from coloured ornamental work upon Reveals of doorways



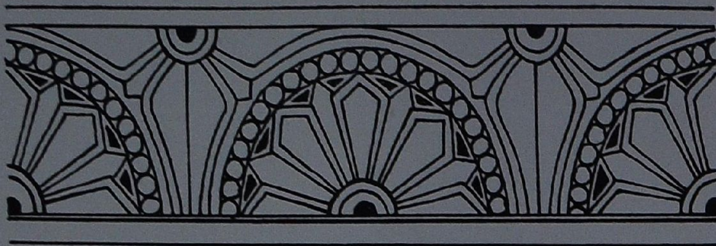
Fathpur Sikri; Detail of string moulding around Dome; Jodh Bai's Palace.



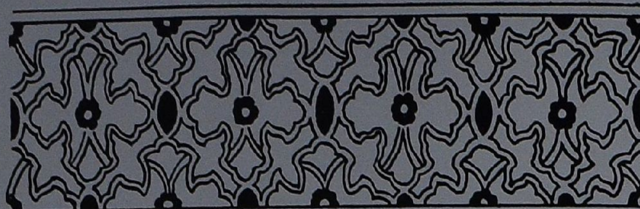
Fathpur Sikri; Moulding at the base of pillar;
Diwan-i-Khas



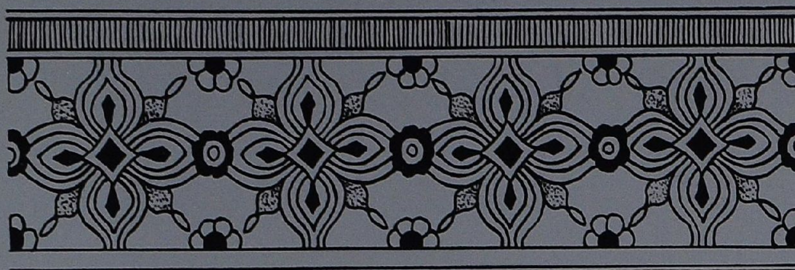
Fathpur Sikri; Floral design on the wall; The Great Masjid



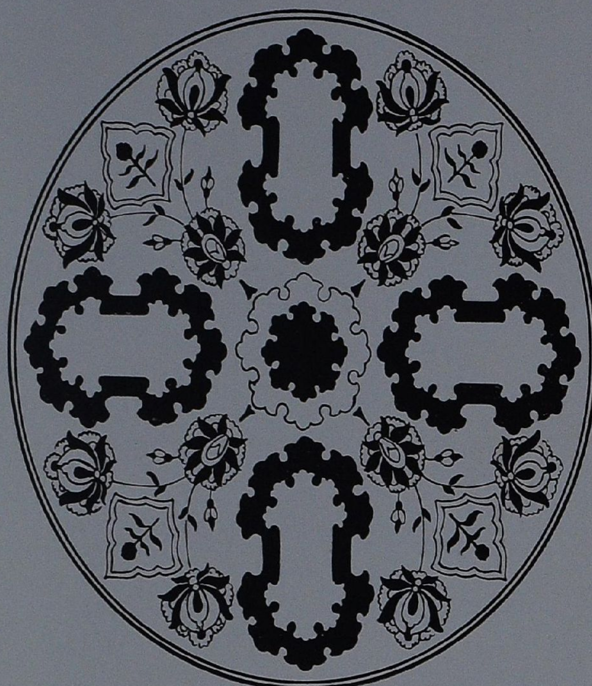
Fathpur Sikri; Decoration on the cornice; The Great Masjid



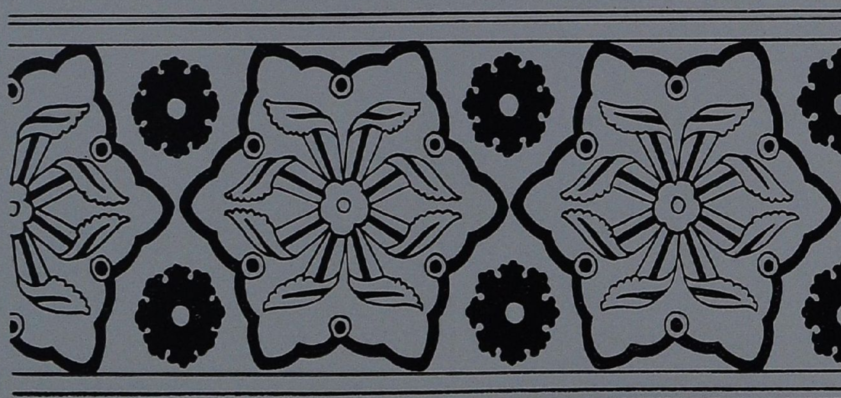
Fathpur Sikri; Decoration on the entrance to the Shrine; Turkish Sultan's House



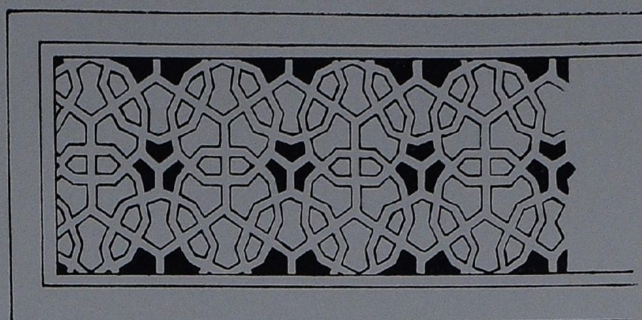
Fathpur Sikri; Floral and geometric designs on the wall; The Jami Masjid



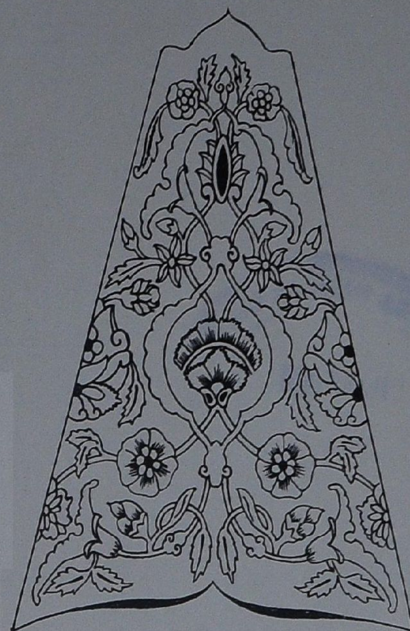
Fathpur Sikri; Floral and decorative patterns on the wall; The Great Masjid



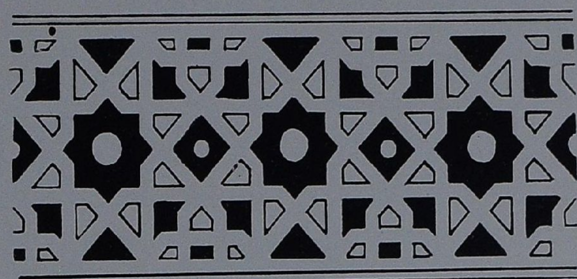
Fathpur Sikri; Floral and decorative patterns on the wall; The Great Masjid



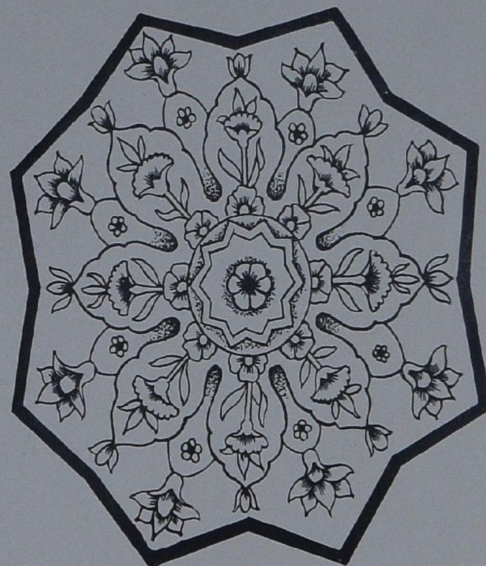
Fathpur Sikri; Perforated lattice work on a window; The Panch Mahal



Fathpur Sikri; Floral design inside the dome; The Great Masjid



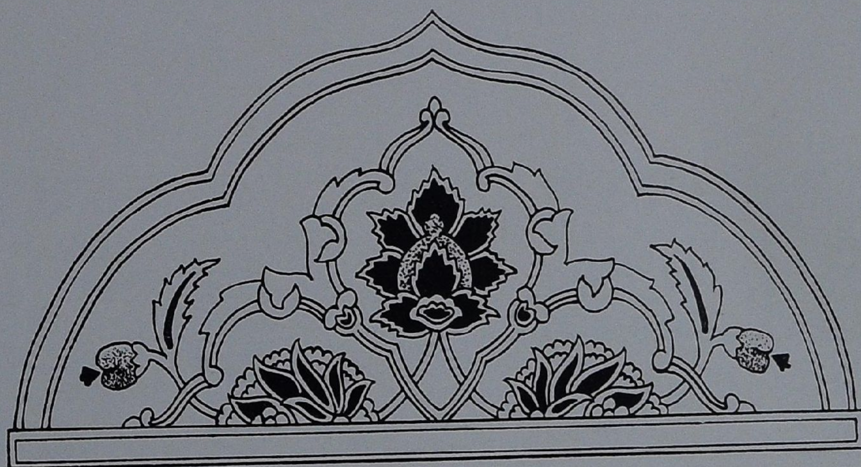
Fathpur Sikri; Perforated lattice work; The Great Masjid



Fathpur Sikri; Drawing from colour decoration inside the Cenotaph Chamber; Salim Chishti's Tomb



Fathpur Sikri; Drawing from colour decoration inside the Cenotaph Chamber; Salim Chishti's Tomb



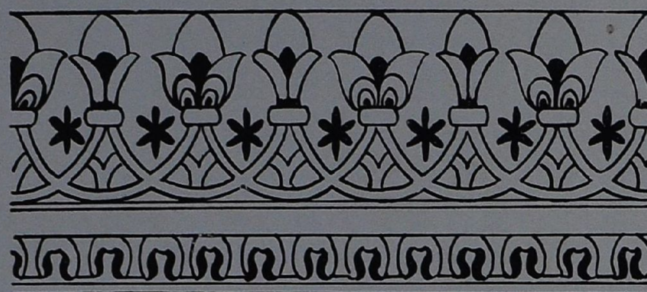
Fathpur Sikri; Floral Design in the cornice; The Great Masjid



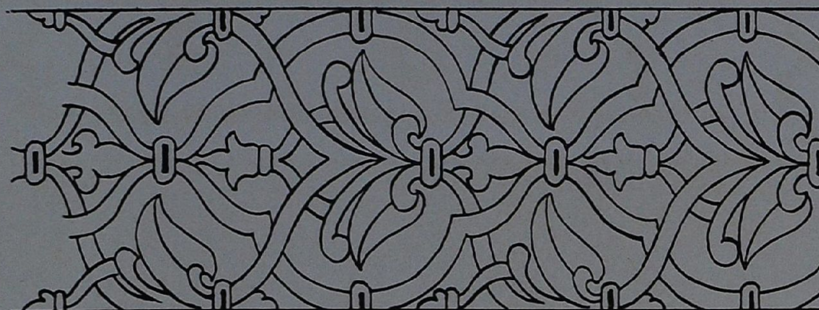
Fathpur Sikri; Decorative design on the wall; The Panch Mahal



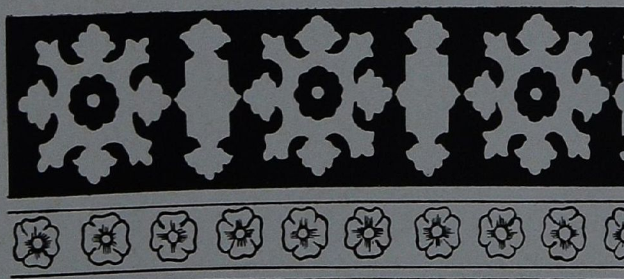
Fathpur Sikri; Decorative design on the wall; The Great Masjid



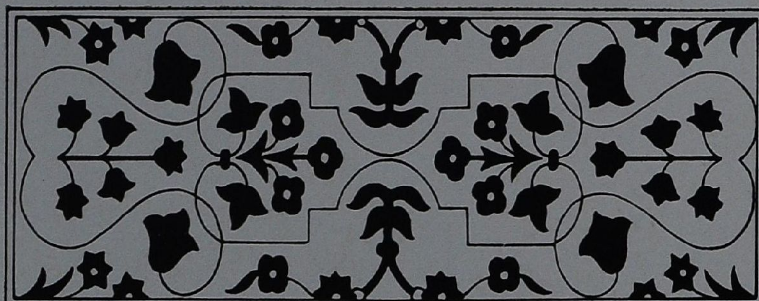
Fathpur Sikri; Detail of lower parapet; Salim Chishti's Tomb



Fathpur Sikri; Decorative design on the main body of the Mosque; The Jami Masjid



Fathpur Sikri; Geometric pattern inside the Cenotaph Chamber; Salim Chishti's Tomb

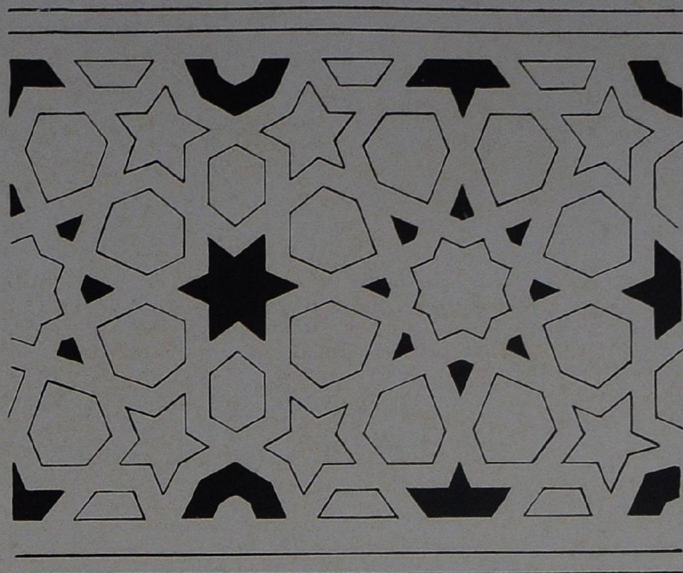


Fathpur Sikri; Decorative design below the cornice; The Great Masjid

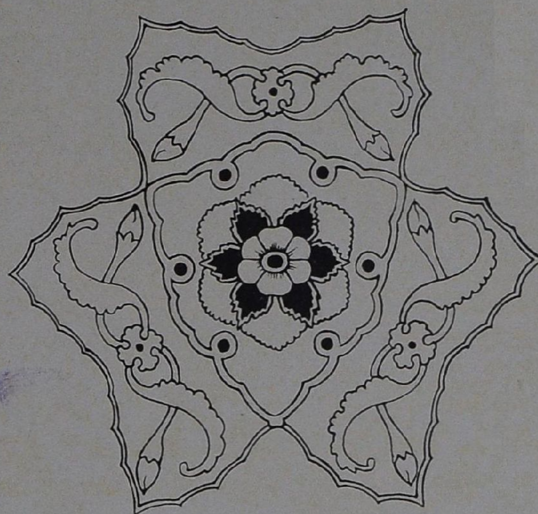
PLATE—XII.



AGRA : CHINI-KA-RAUZA : Tiled Panel on the North Facade, East Side.



Fathpur Sikri; Perforated lattice work; The Panch Mahal



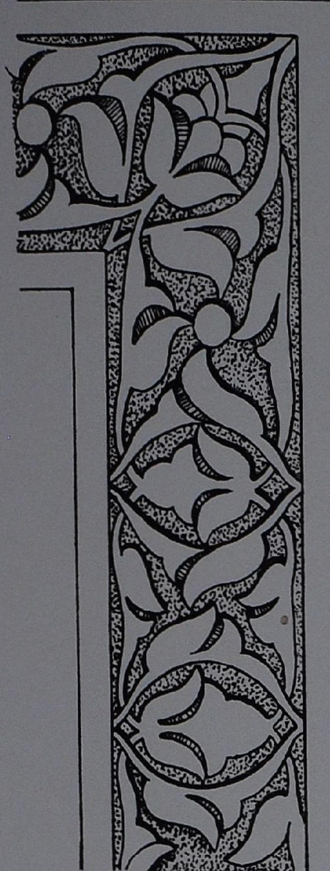
Fathpur Sikri; Floral motifs on the wall;
The Great Masjid.

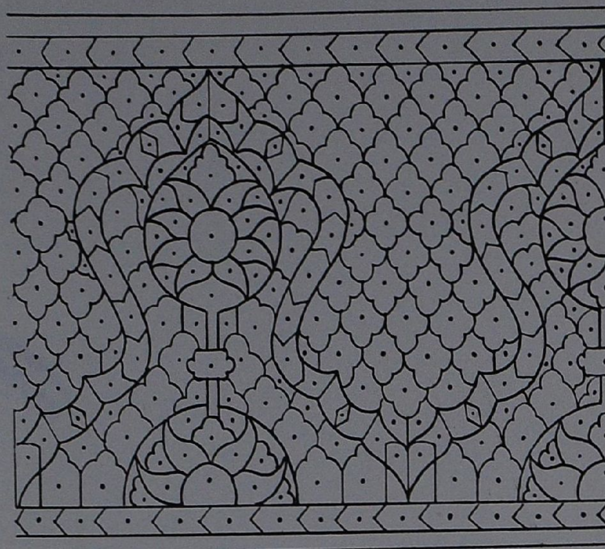


Fathpur Sikri; Detail of string moulding around dome;
Jodh Bai's Palace

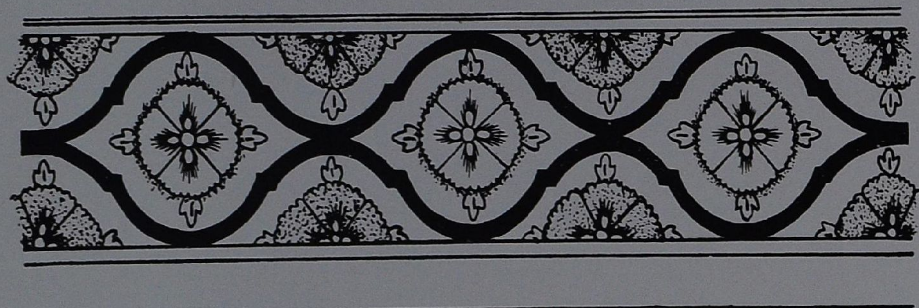


Fathpur Sikri; Details of curved borders around panels and wall recesses; Raja Birbal's House.

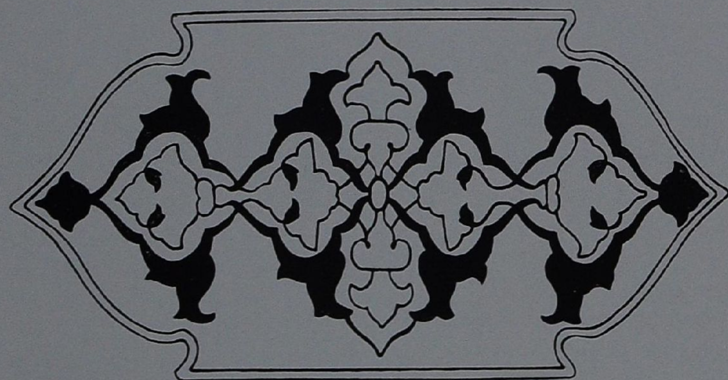




Fathpur Sikri; Decoration on the base of a pillar; Salim Chishti's Tomb



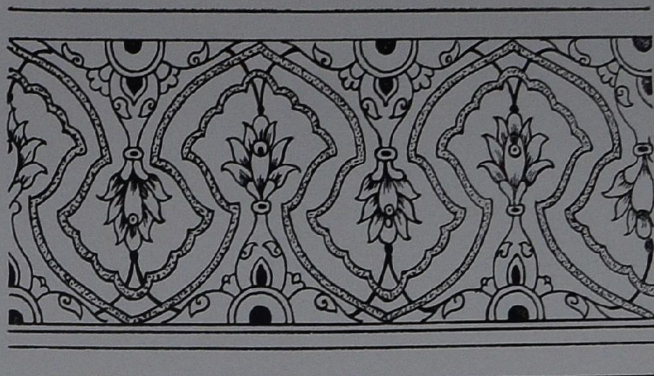
Fathpur Sikri; Decoration upon Architraves around entrance to the Cenotaph Chamber



Fathpur Sikri; Decoration on the lower parapet; Salim Chishti's Tomb



Fathpur Sikri; Decorative patterns on the dome; The Great Masjid





Fathpur Sikri; Floral design and geometric patterns from the Turkish Sultan's House, The Jami Masjid, Salim Chishti's Tomb, The Great Masjid



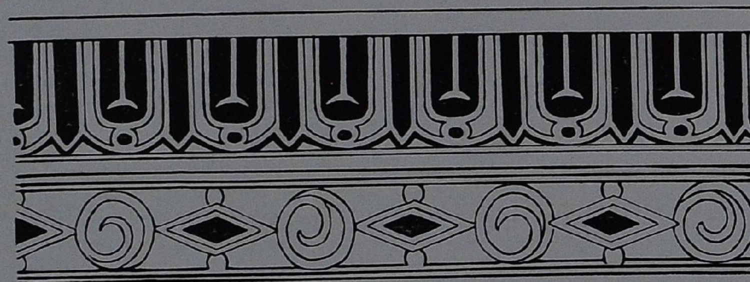
Fathpur Sikri; Floral design on the entrance to the Shrine; Salim Chishti's Tomb



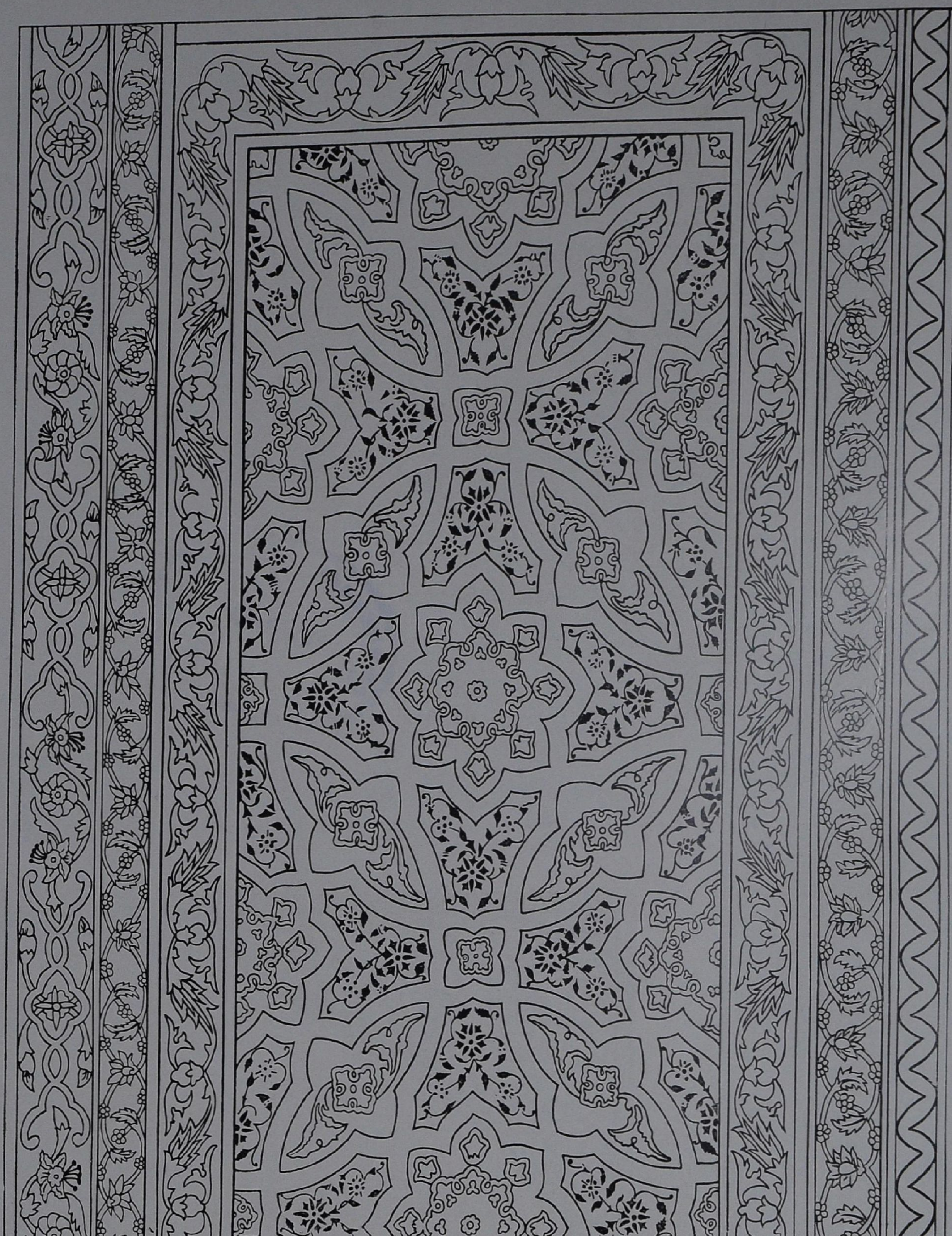
Fathpur Sikri; Floral decoration on the varandah; Salim Chishti's Tomb



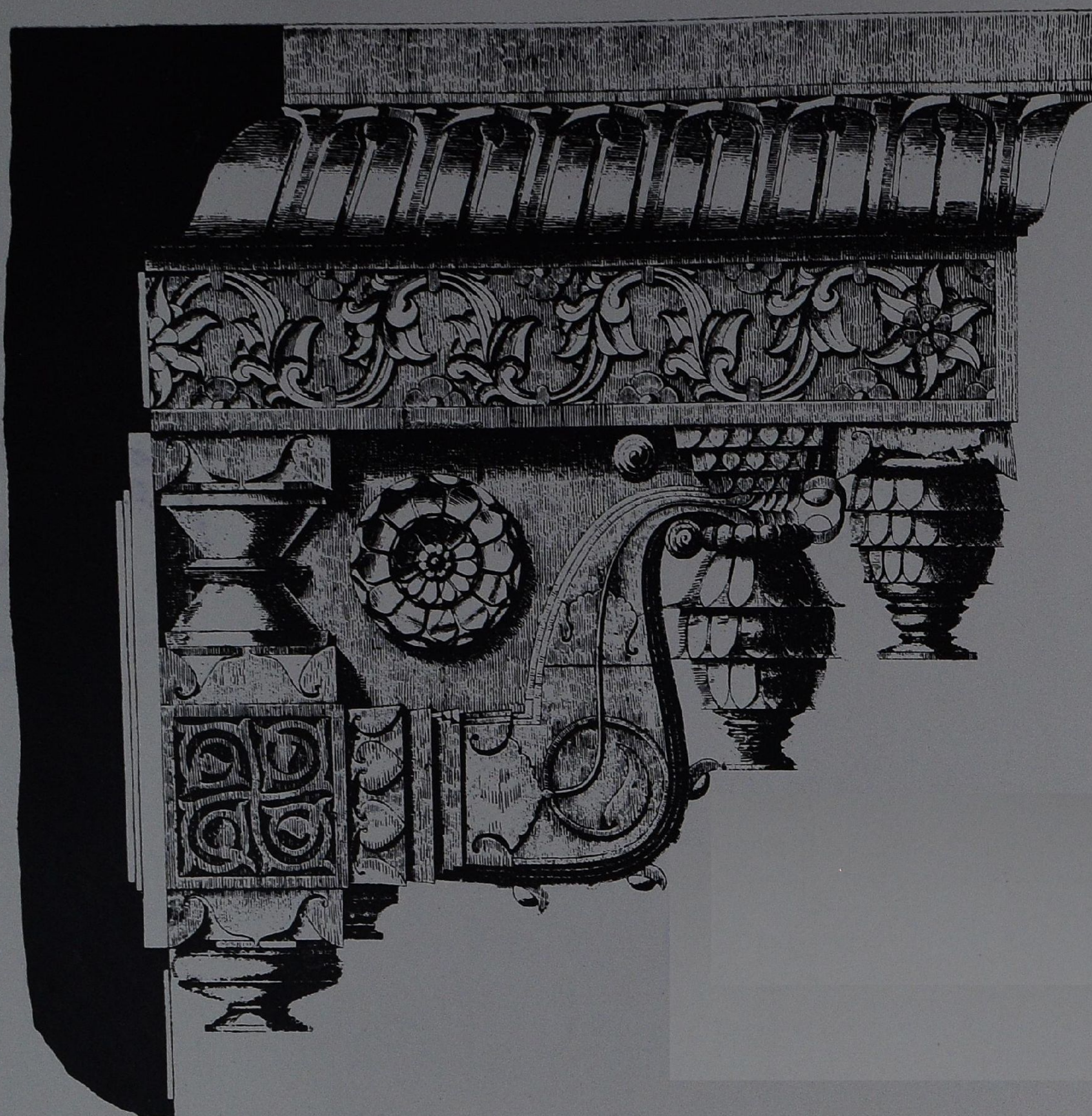
Fathpur Sikri; Curved border around inner Shrine; Salim Chishti's Tomb



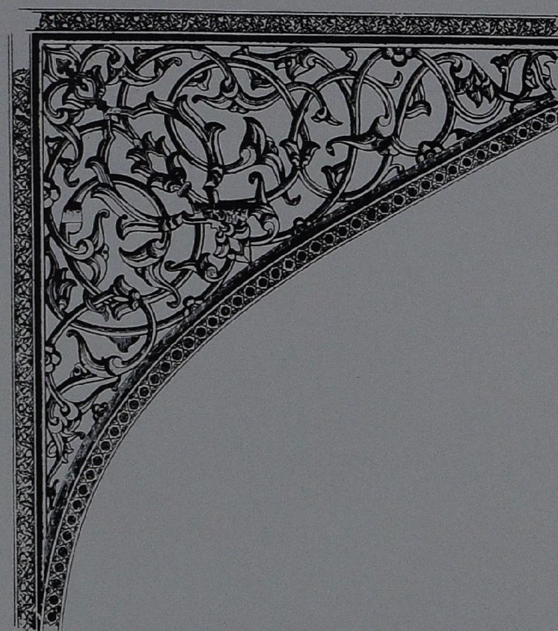
Fathpur Sikri; Decoration on Fiscia around the roof of the varandah; The Great Masjid



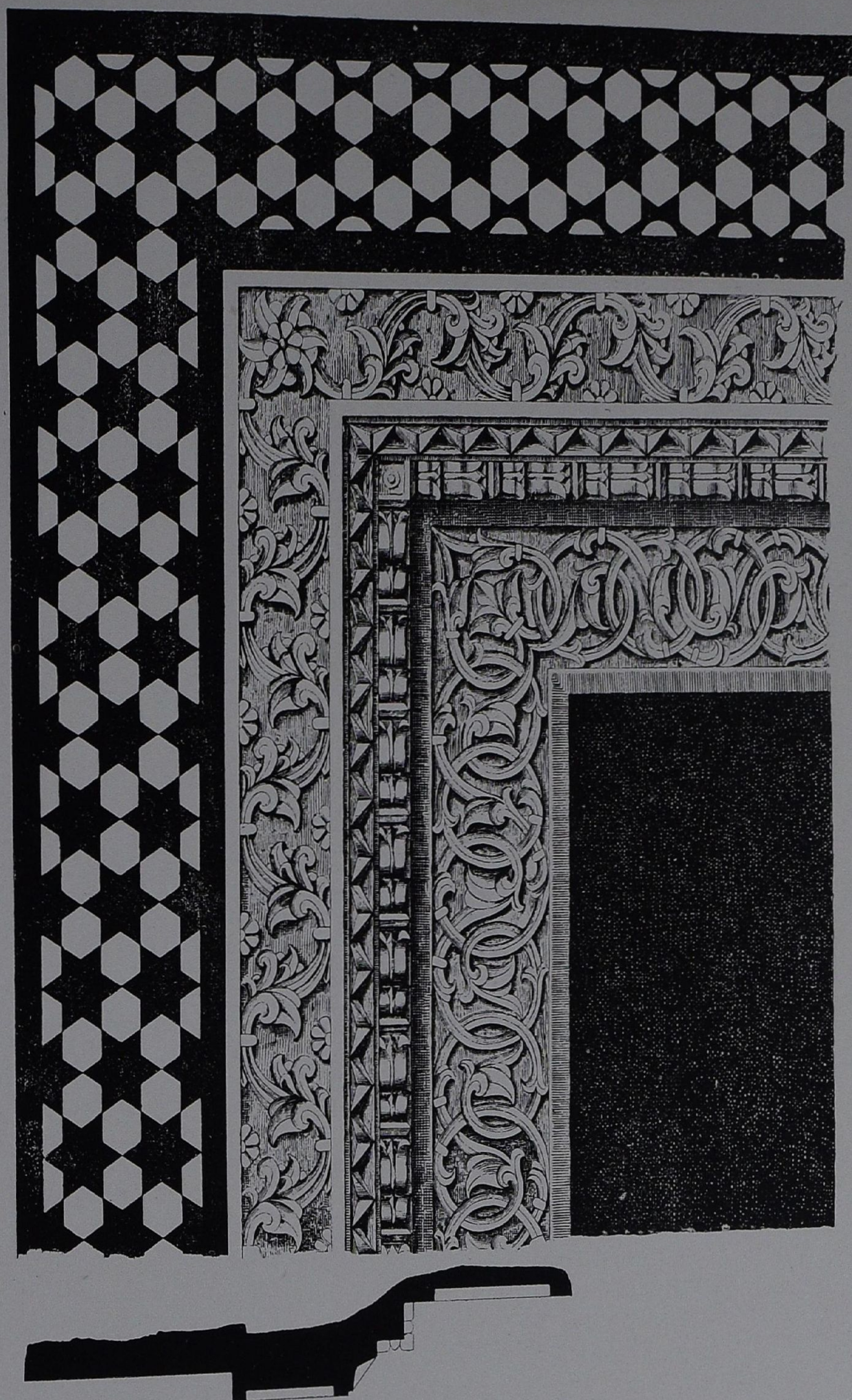
Sikandra; Tomb of Akbar; Details of Soffit of arch



Sikandra; The Kanch Mahal; Detail of carved stone brackets supporting balcony over entrance door beneath the porch, North Facade



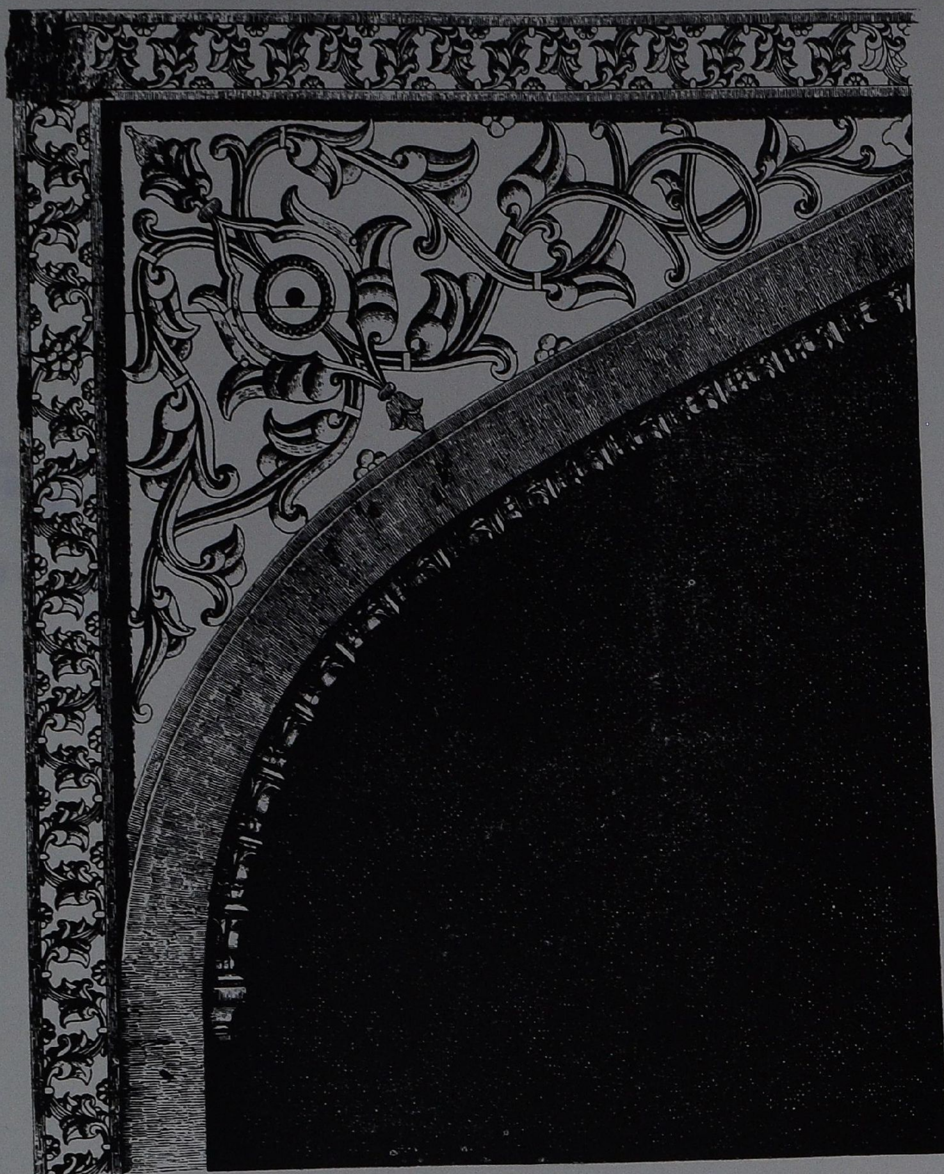
Sikandra; The Kanch Mahal; Detail of carved spandril above the North-West entrance



Sikandra; The Kanch Mahal; Detail of carved Architrave in stone around doorway beneath the Porch, North Facade



Sikandra; The Kanch Mahal; Detail of carving upon archway over Main entrance



Sikandra; The Kanch Mahal; Detail of carved spandril over the North-East entrance



Sikandra; The Kanch Mahal; Detail of carving upon Splayed James of Archway over main entrance

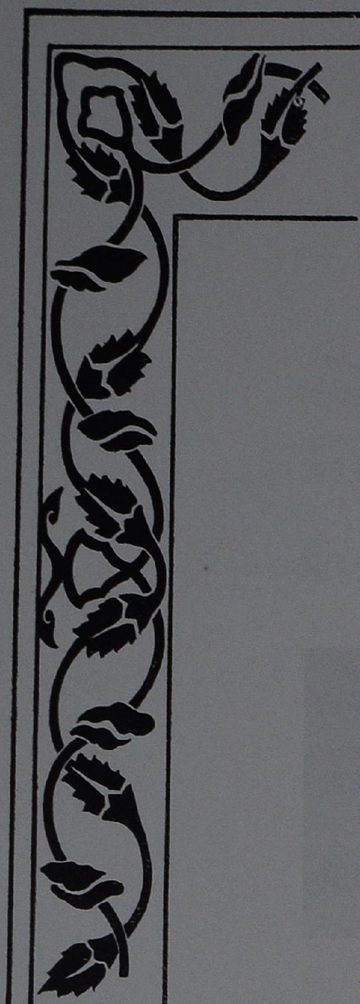
PLATE—XIII.

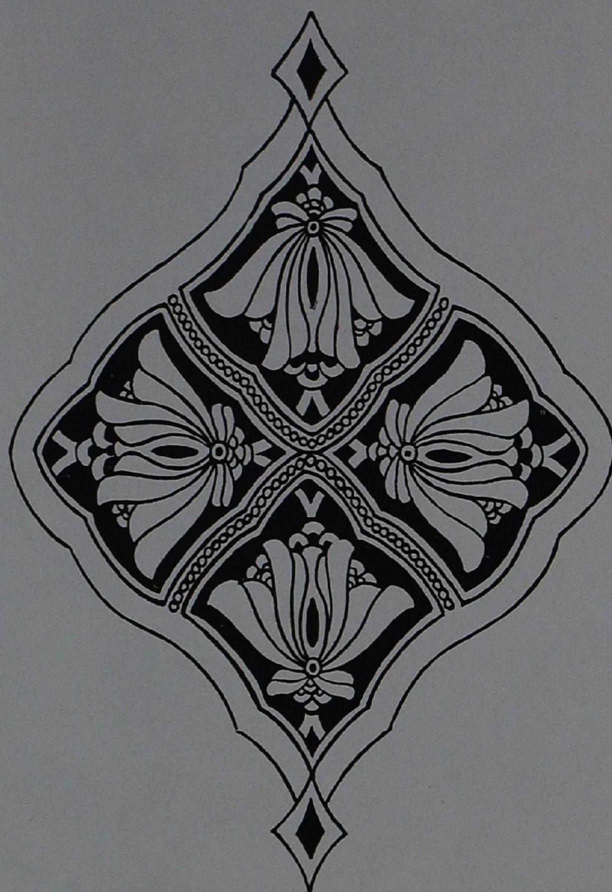


AGRA : CHINI-KA-RAUZA : Detail of Colour Decoration upon the Soffit of the Dome (Springing).



Sikandra; Tomb of Akbar; drawing from coloured decorations from different parts of the tomb

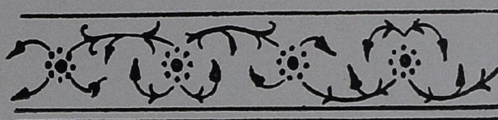


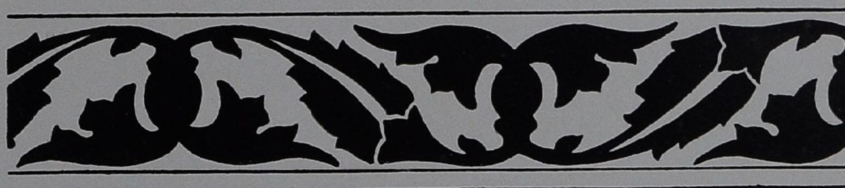




Sikandra; Tomb of Akbar; drawing from coloured decorations from different parts of the tomb

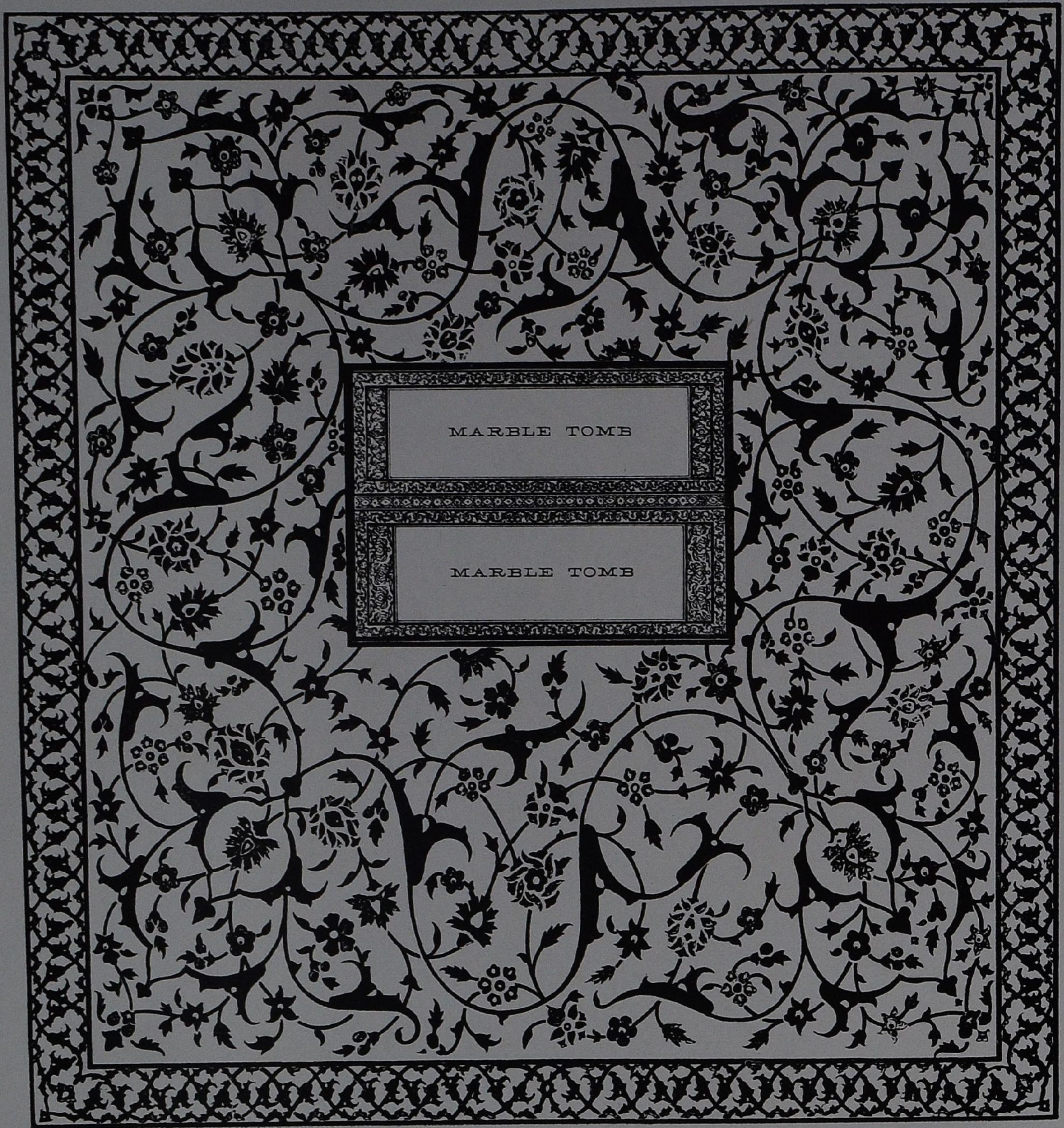






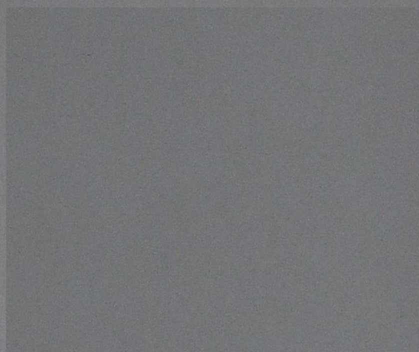


Sikandra; Tomb of Akbar; drawing from coloured decorations from different parts of the tomb



Agra; Itmaud-ud-Daulah's tomb; Mosaic pavement on the upper floor



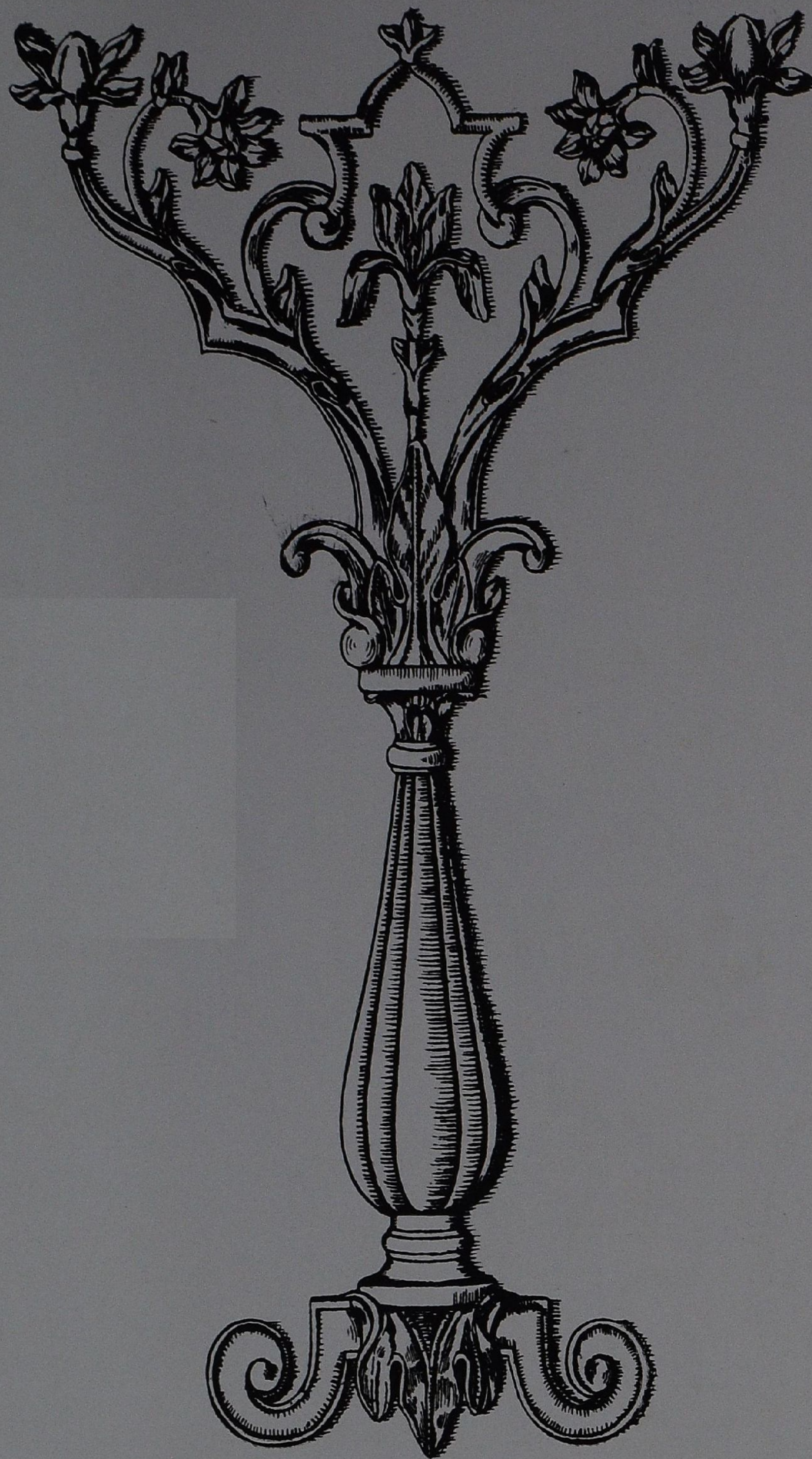








Agra; The Taj Mahal; Decoration on marble and marble inlay work.





Delhi Fort; Marble inlay work and carved decoration in the Diwan-i-Am and Diwan-i-Khas

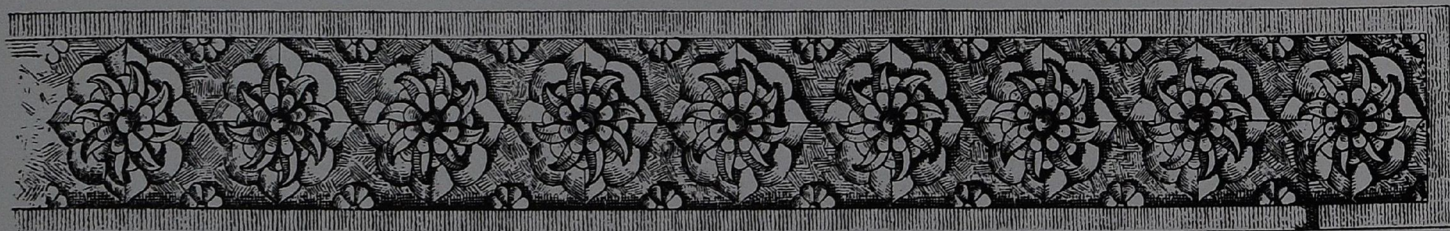




Delhi Fort; Marble inlay work and carved decoration in the Diwan-i-Am and Diwan-i-Khas



Delhi Fort; Marble inlay work and carved decoration in the Diwan-i-Am and Diwan-i-Khas



Sikandra; The Kanch Mahal; Detail of carving upon Splayed Jambs of Archway over main entrance

PLATE—XIV.

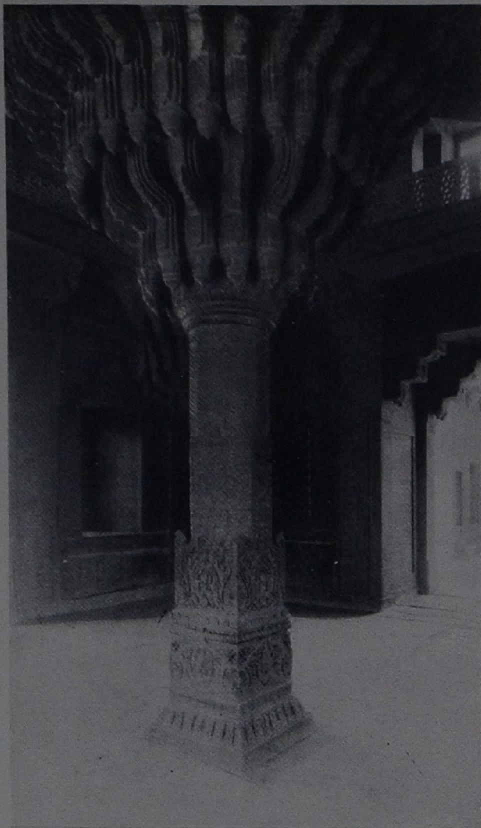


AGRA : CHINI-KA-RAUZA : Detail of Colour Decoration upon the Soffit of the Dome.



15. *Saseram (Bihar): Sher Shah's tomb.*
(Copyright : Archaeological Dept.)

16. *Fathpur Sikri : Courtyard of Saint's tomb and mosque.*

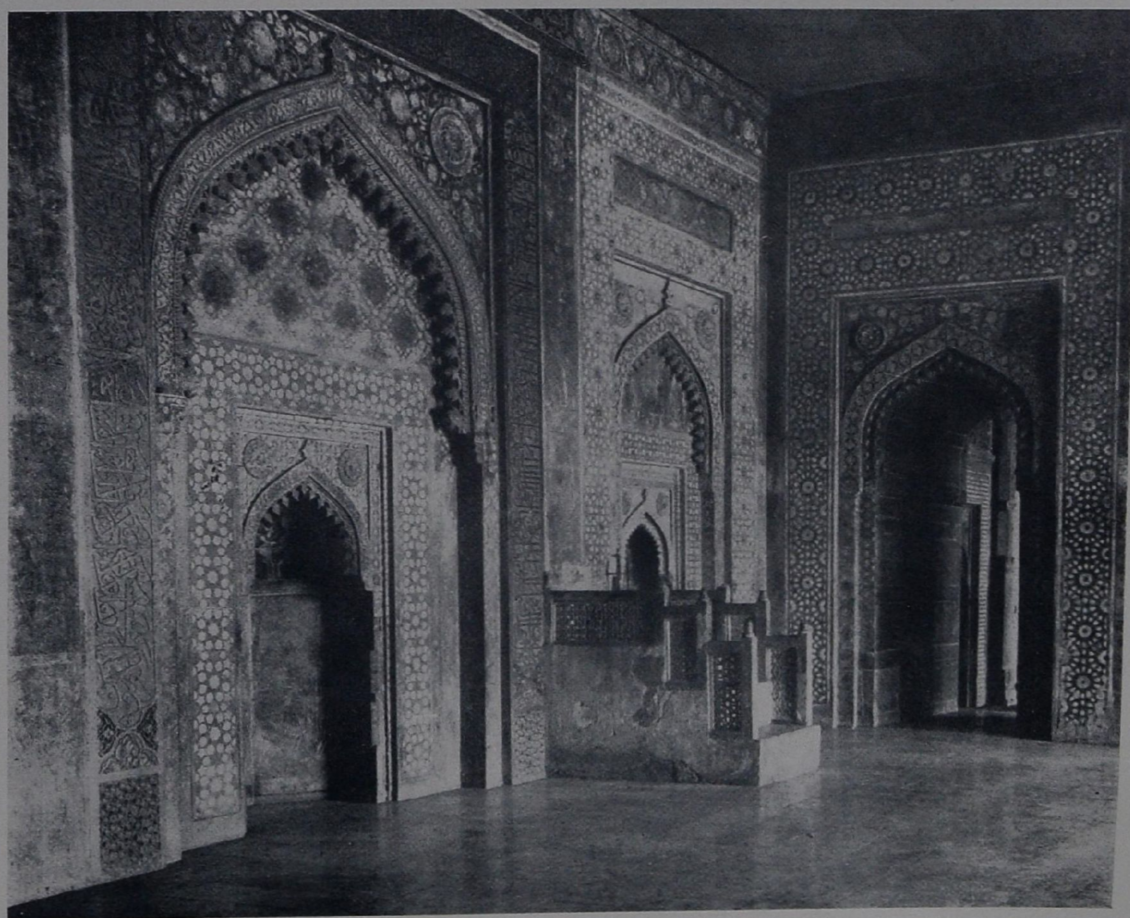


17. Fathpur Sikri : Diwan-i-Khas, interior, brackets and pillar supporting platform.

18. Fathpur Sikri : Saint's tomb, outside.



19. Fathpur Sikri : Buland Darwaza.



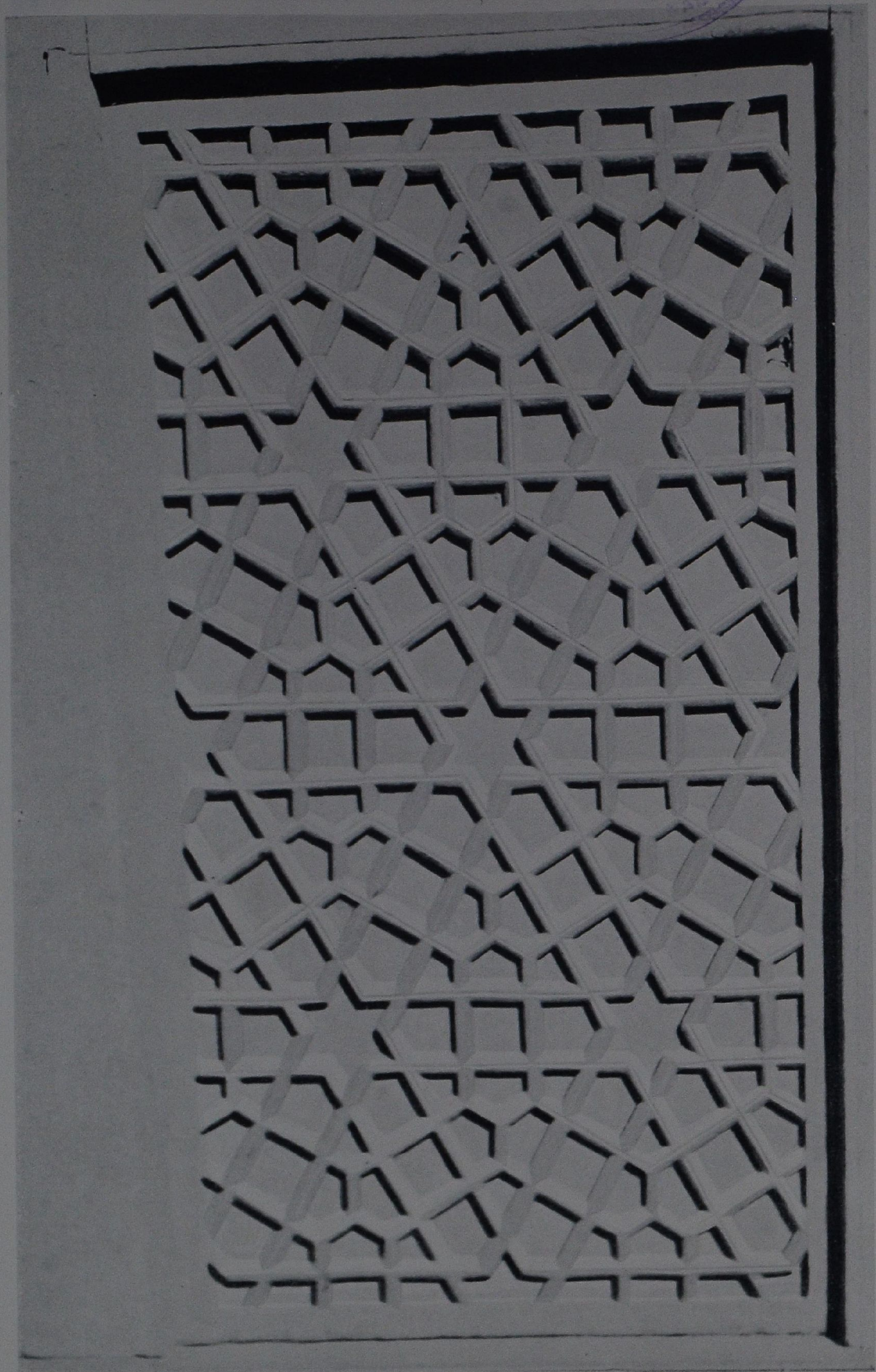
20. Fathpur Sikri : Great Masjid, central arch.



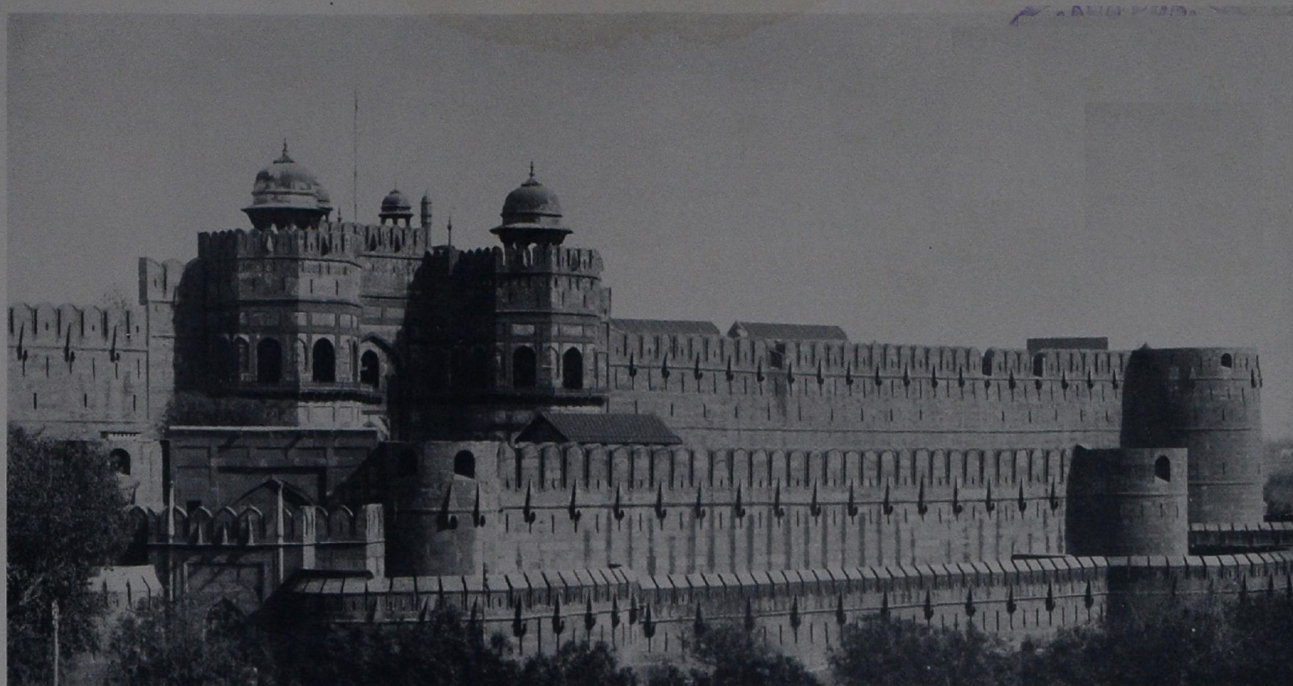
21. Fathpur Sikri : Red sandstone door, relief (Hindu pattern).



22. *Fathpur Sikri : Red sandstone relief carving (geometric).*

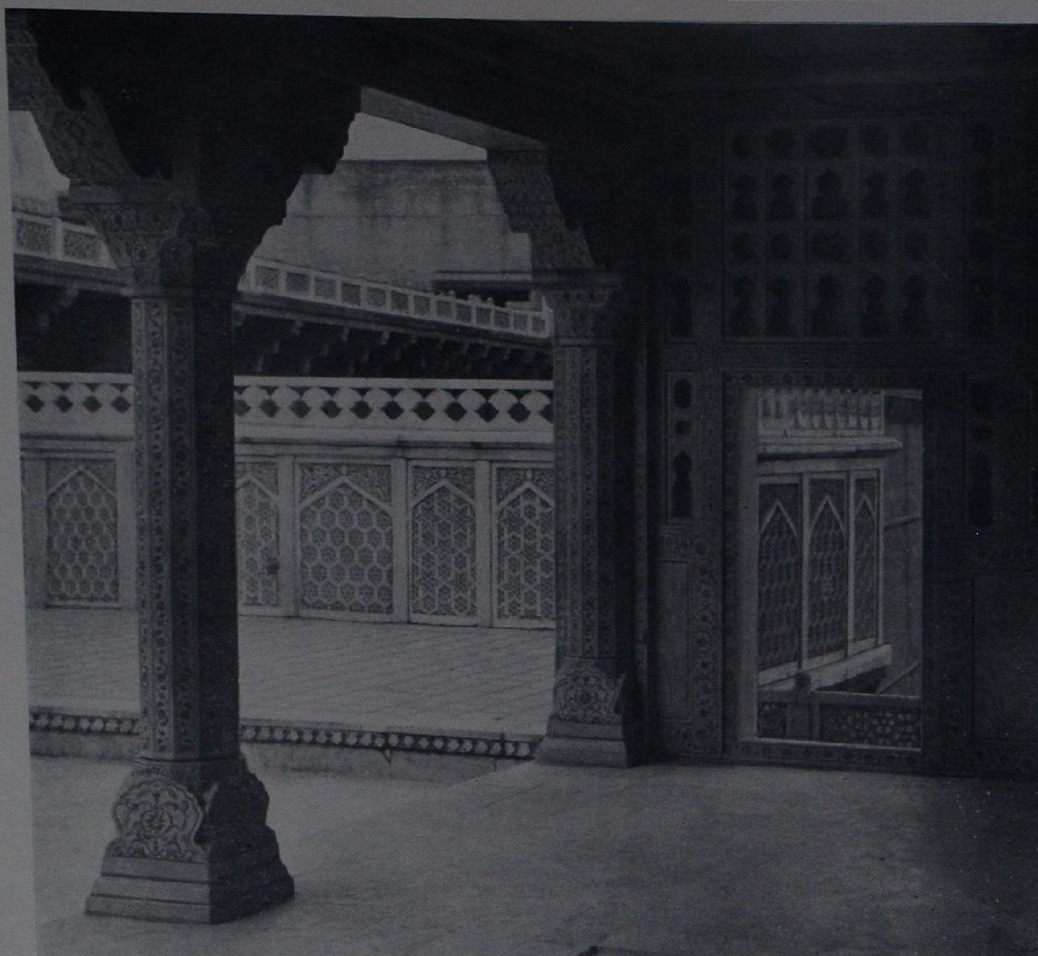


23. *Fathpur Sikri : Red sandstone relief carving (geometric).*

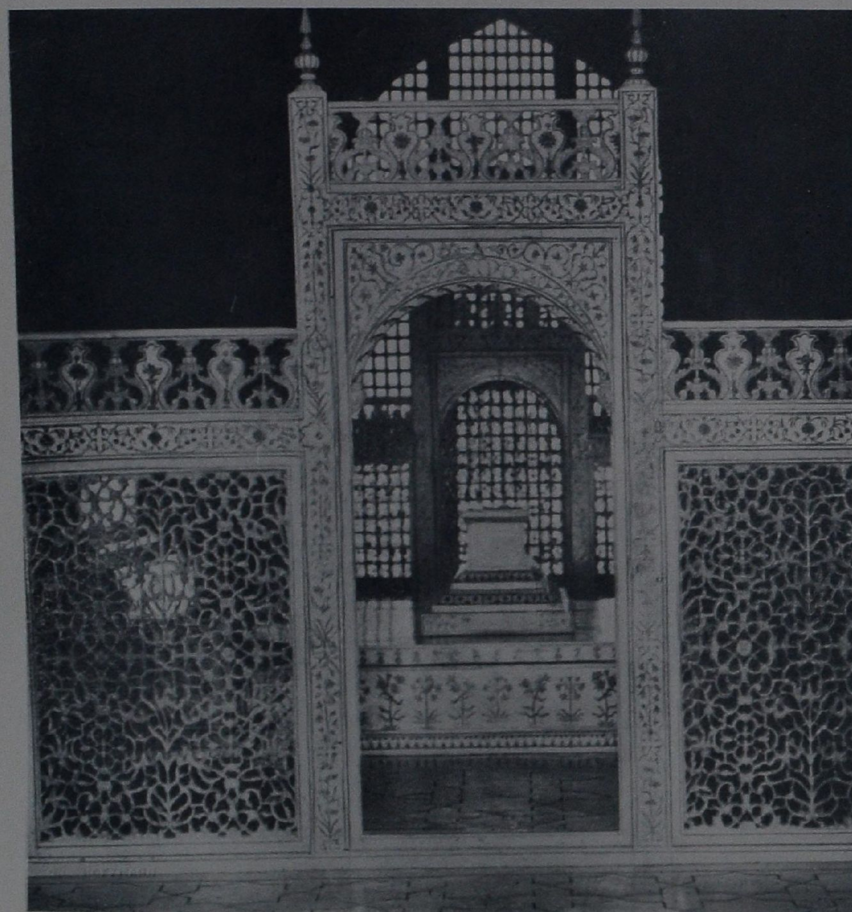


24. *Agra Fort: General view from the west.*

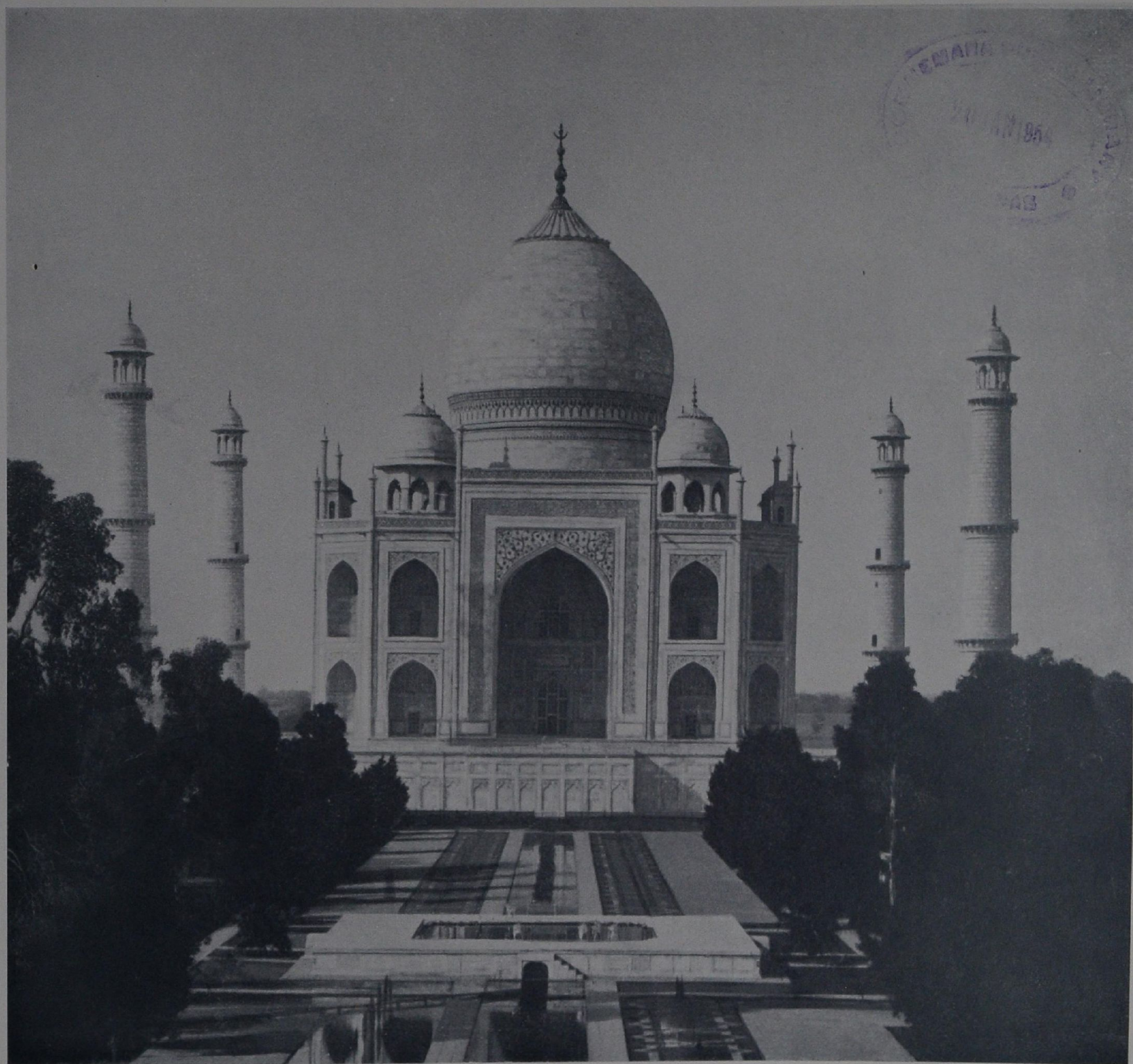
25. *Agra Fort: Octagonal Tower and Diwan-i-Khas.*



26. *Agra Fort : Diwan-i-Khas.*



27. *Taj Mahal : Marble Screen round tomb-chamber.*



28. *Taj Mahal: Front view.*

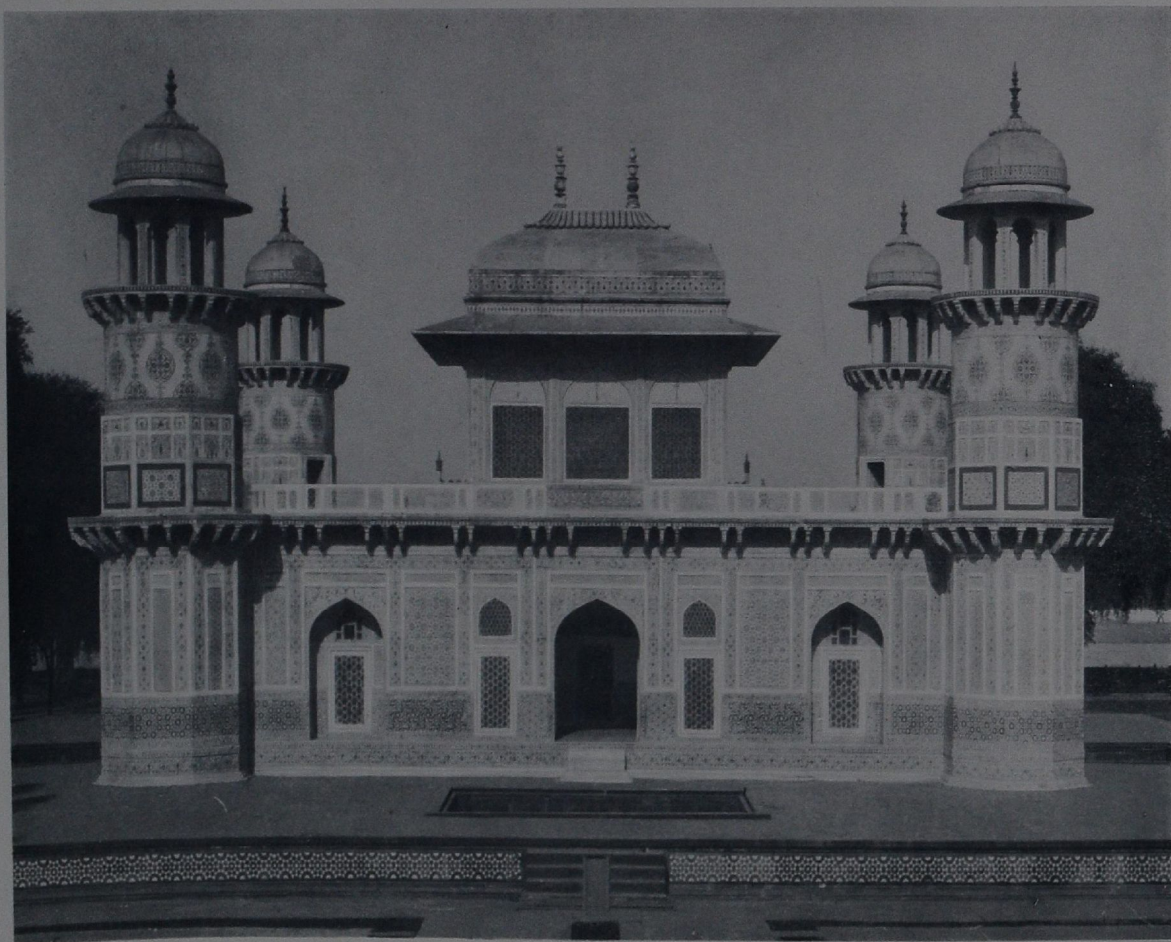


29. *Taj Mahal : Details of Marble screen.*



30. *Taj Mahal: Marble Lattice (floral).*

31. Taj Mahal : View from the river.



32. Agra : Itimad-ud-Daula's tomb, outer view.

33. Sikandra : Akbar's tomb, outer view.

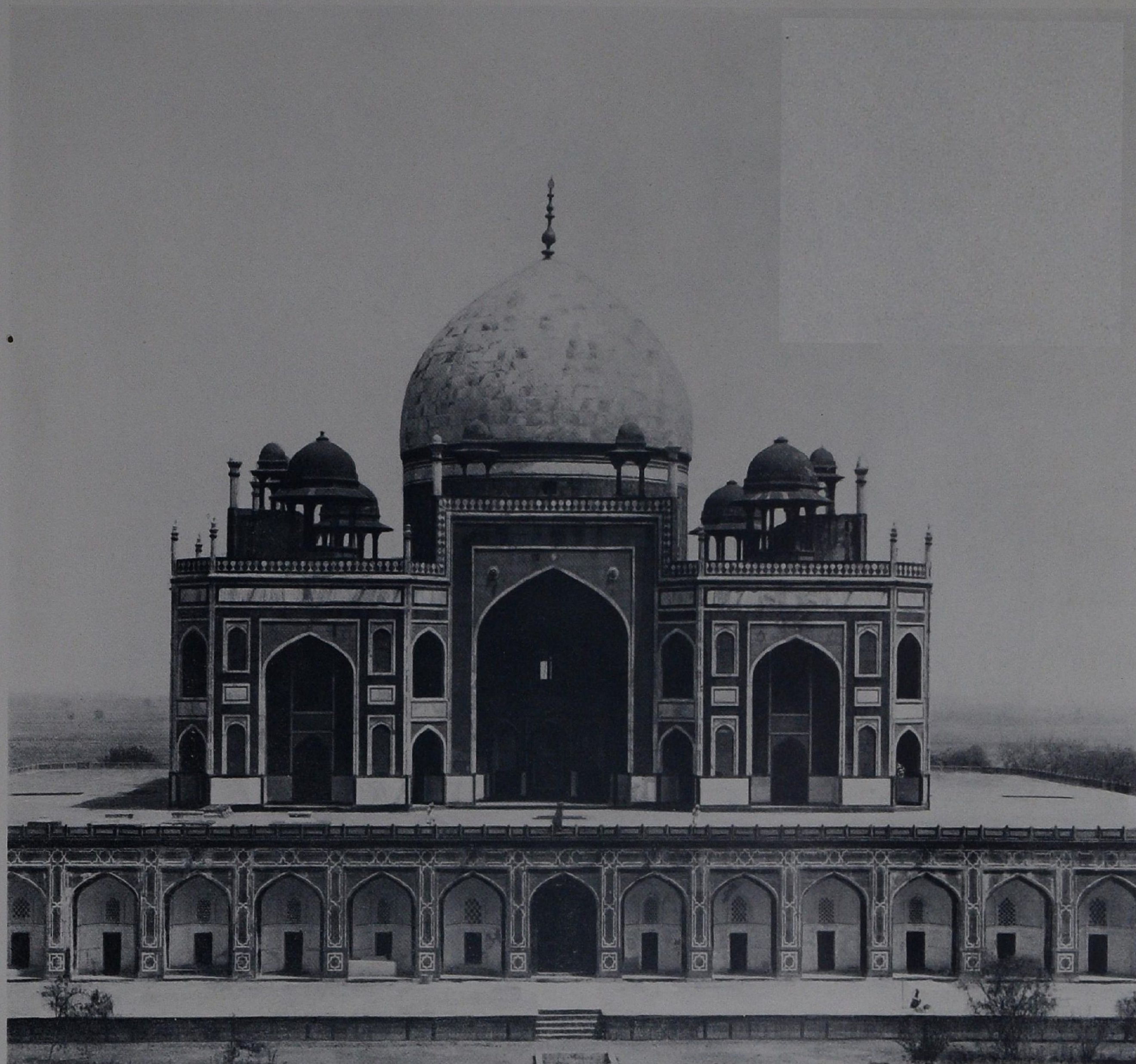


34. Delhi : Main entrance to Purana Qila.
(Copyright : Archaeological Dept.)

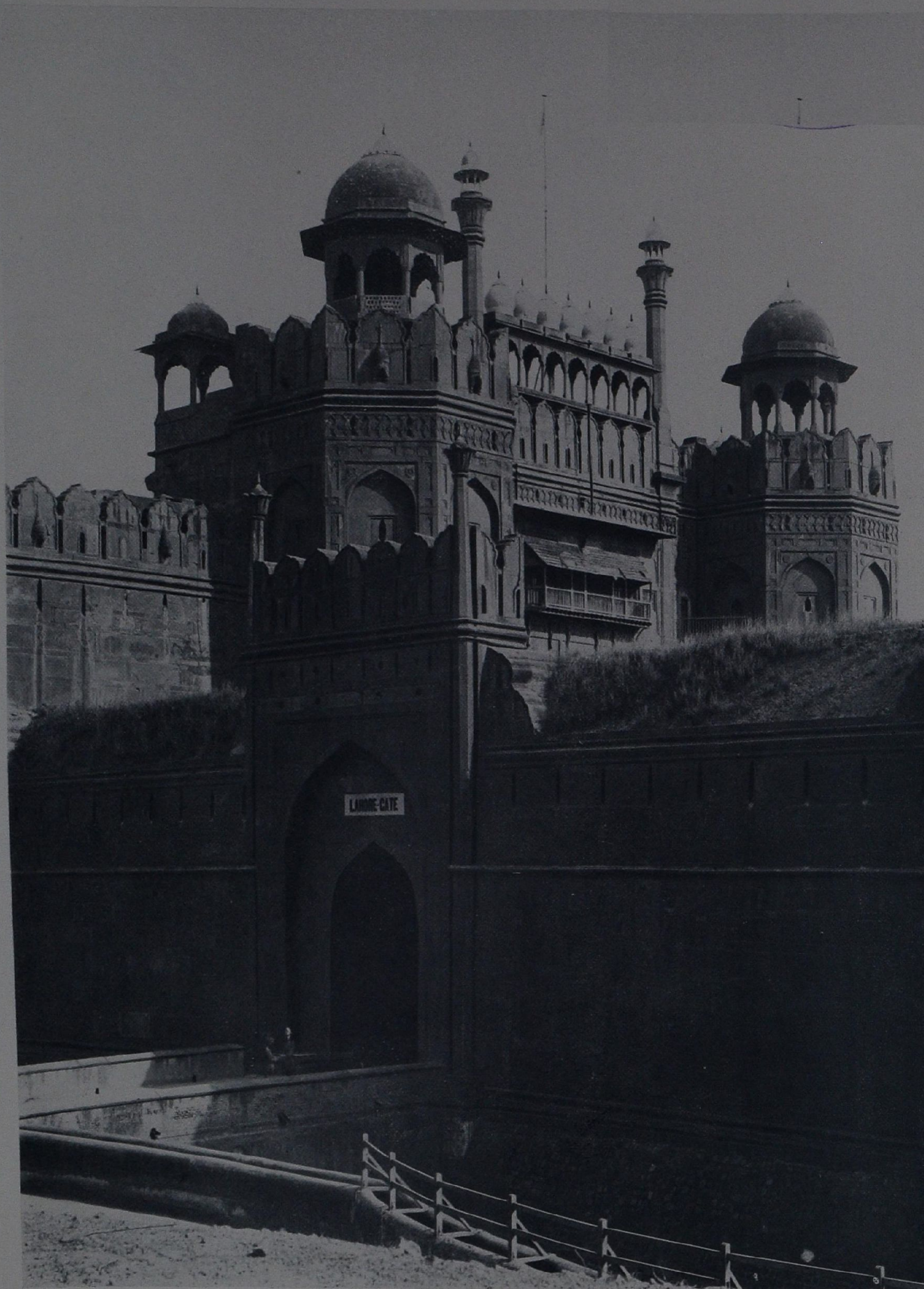
35. Delhi : Purana Qila; Front of Sher Shah's mosque.



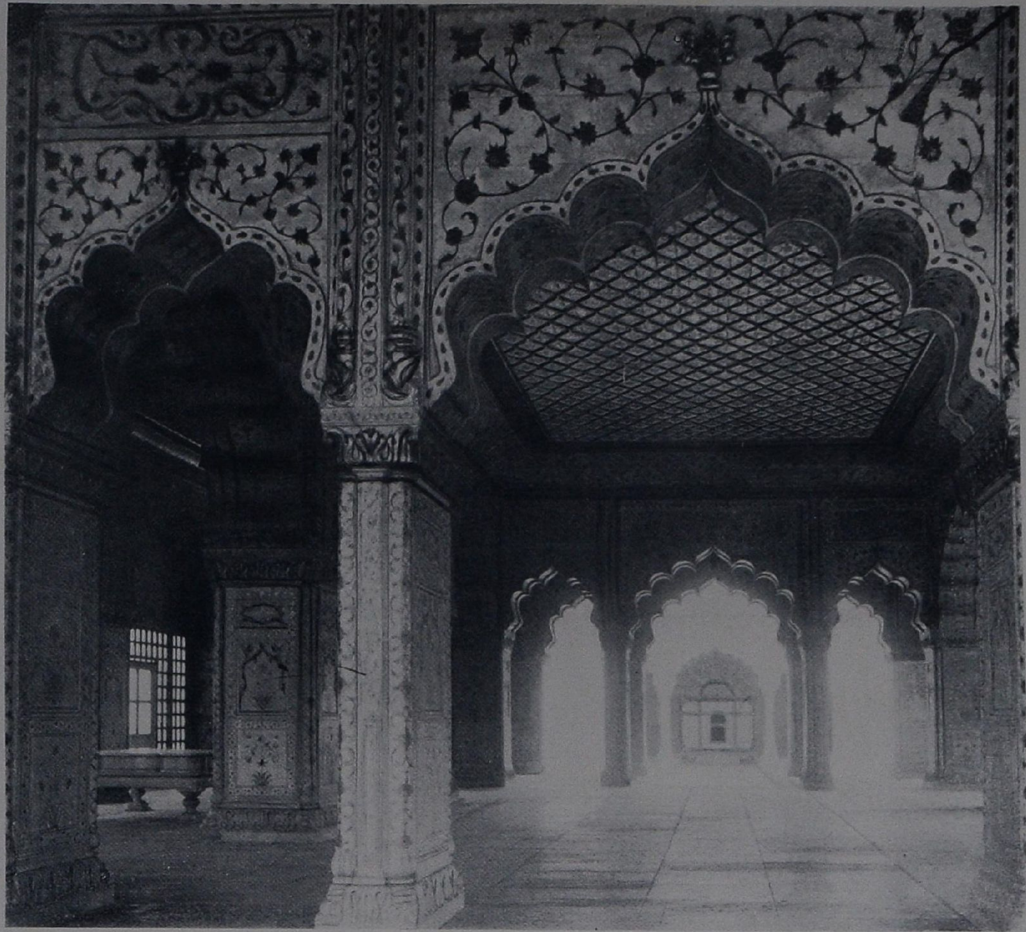
36. Delhi : Isa Khan's tomb.
(Copyright : Archaeological Dept.)



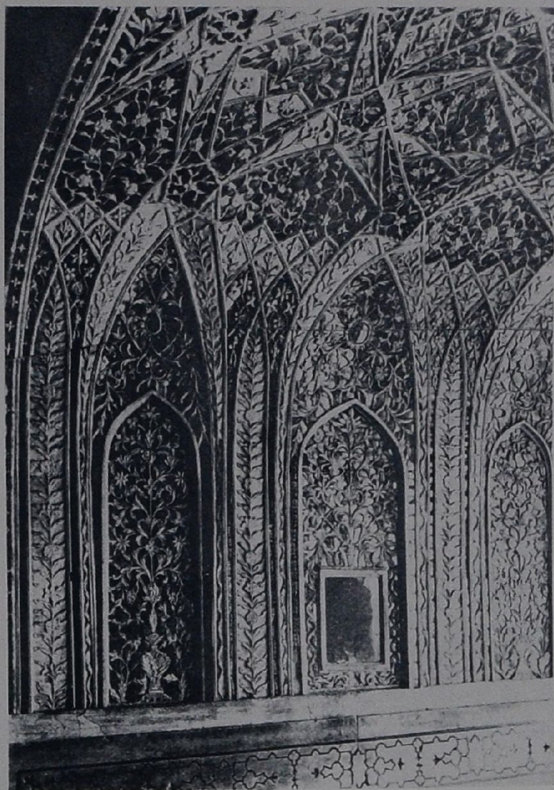
37. *Delhi : Humayun's tomb.*



38. *Delhi Fort: Lahore Gate.*



39. Delhi Fort : Diwan-i-Khas.



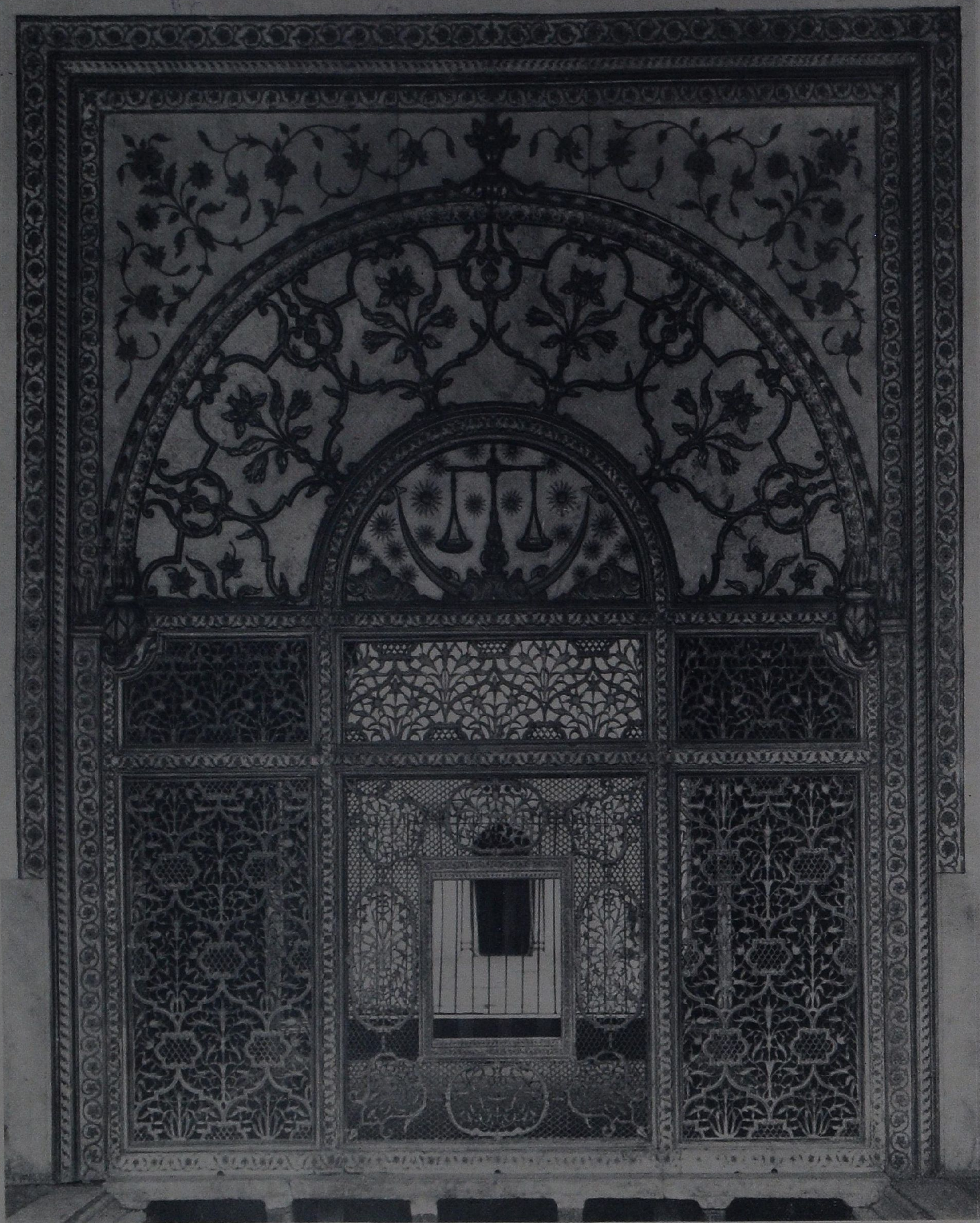
40. Delhi Fort : Marble Inlay work.



41. *Delhi Fort: Marble Inlay work.*



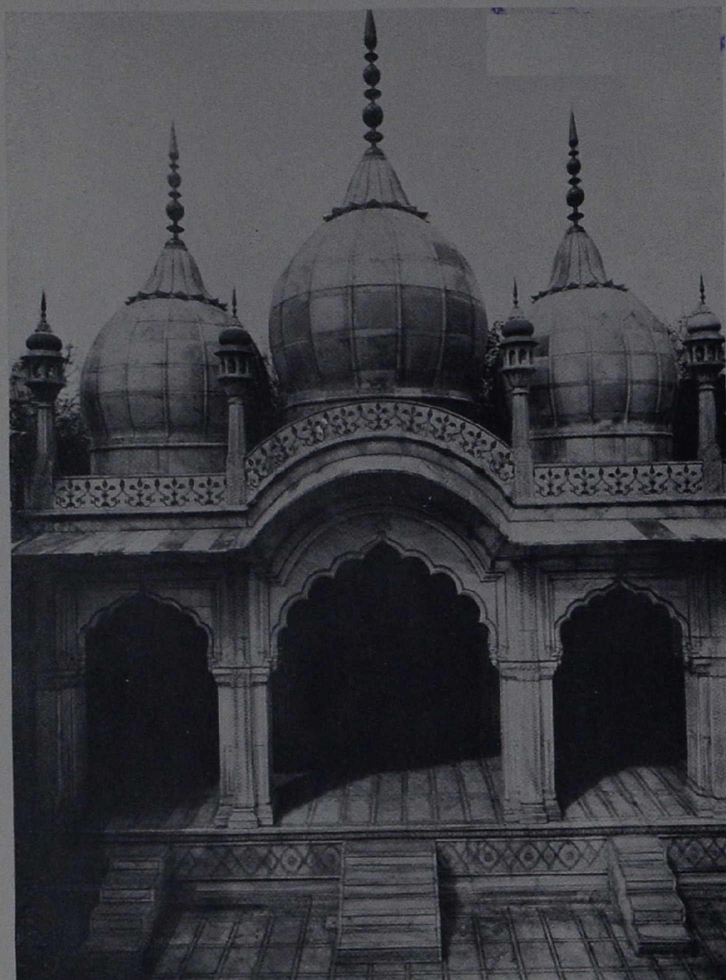
42. Delhi Fort : Pietra Dura work.



43. *Delhi Fort : Diwan-i-Khas, Scales of Justice.*



44. *Delhi Fort : Shish Mahal.*



45. Delhi Fort : Pearl Mosque.

CORRECTIONS

Page III, line 9, for *question. With*—read *question :—with.*

Page V, line 32, for *reached*—read *received.*

Page IX, line 14, for *damscening*—read *damascening.*

Plate 40 for *Marble Inlay work*—read *Sish Mahal.*

Plate 44 for *Sish Mahal*—read *Marble Inlay work.*

